

## CONTRACT FOR COAL.

[To accompany Bill H. R. No. 771.]

MAY 24, 1860.

Mr. MORSE, from the Committee on Naval Affairs, made the following

### REPORT.

*The Committee on Naval Affairs, to whom was referred so much of the annual report of the Secretary of the Navy as relates to a "conditional contract" made by him for the purpose of securing a supply of coal for the use of the navy, and other privileges in the Republic of New Granada, report as follows:*

That on the 21st day of May, 1859, Hon. Isaac Toucey, Secretary of the Navy, entered into a contract with the "Chiriqui Improvement Company" for the supply of coal for the use of the United States steam vessels-of-war attached to the Gulf and Pacific squadrons, and for naval depots in the same latitude, opposite each to the other, upon the Atlantic and Pacific oceans. Assuming the policy of this contract in other particulars, the first question which presents itself for determination is one of title. Had Mr. Thompson a clear and indisputable title to the possessions, rights, and privileges claimed by him and his associates in the province of Chiriqui and Republic of New Granada? The original grants in the Spanish language, with their translations, were laid before your committee, with the certificate of the New Granadian minister to the United States to the authenticity of the same, and that they were all proper, legal, and binding instruments, according to the laws of New Granada. The opinion of the Attorney General of the United States has also been pronounced in support of the legal soundness of the rights of the "Improvement Company," through Mr. Thompson, to all the property and privileges ceded to them. A copy of the opinion of the Attorney General, together with the certificate of the New Granadian minister, are herewith submitted.

One of the conditions of the grant of lands, mines, and harbor-rights to the "Improvement Company" was that the company should open a good carriage road from the shores of the Chiriqui Lagoon, on the Atlantic, to the town of David, on the Pacific, across the isthmus of Chiriqui, within the time specified in the grant. The company have already expended large sums of money on this road, and will complete it within the time named in the grant. There is testimony from New Granadians, officers and people, that a portion

of this road is already completed, and the public mails of New Granada now carried over it. This, of itself, is evidence both of the soundness of their title and the value they place upon their possessions, for no sane men would make expensive surveys and build roads in a foreign country where their title was questionable, or where there was nothing to warrant an ample remunerative return for their investments. Facts like this, showing large expenditures of money to fulfil the conditions of the grant, with the endorsement of the soundness of the title by the President of the Republic of New Granada, by the law officers of the two governments, by the minister of New Granada to the United States, and by the government officials in the province of Chiriqui, ought to be sufficient to remove all doubt on the question of title. Your committee do not, therefore, deem it important to go into detail upon this point; the responsibility of further investigation, if judged necessary, is placed by the bill in the executive, the appropriate department for conducting such investigations.

The important question which arises for our consideration relates to the value of the privileges ceded to the United States and the commercial advantages of the improvements contemplated by the company to the maritime nations of the earth, and more especially to the United States and New Granada. To arrive at a clear understanding of the advantages secured by the contract it becomes necessary to refer briefly to the several harbors on which the transit routes now sought to be brought into use terminate. Without intending to deal unfairly with any existing route, and without the least desire to detract from their value, it must be confessed that the three routes with which this of Chiriqui is designed to compete are absolutely without harbors suitable for *commercial* purposes. The Panama road commences at Aspinwall, on the Atlantic ocean, at an open roadstead peculiarly exposed to northers, and terminates on the shores of the shallow bay of Panama, on the Pacific. The steamships running between San Francisco and Panama cannot approach within three miles and a half of the shore; thus subjecting all passengers, with their baggage and such light freight as may be carried, to the expense and detention of lighterage. These disadvantages will forever preclude this route from being used as a freight route for general commercial purposes, and confine it to a passenger route. The unhealthiness of the Gulf ports in particular, and the whole route across the Isthmus, presents a serious obstacle to the growth and business prospects of either terminus.

The Nicaragua route is three times the distance of the Chiriqui route from sea to sea, and is also destitute of good harbors. The Tehuantepec transit, although possessing the advantages of being a shorter route from the United States to San Francisco, is even less favored with harborage than either of its rivals; its harbor on the Atlantic being too shoal to admit vessels drawing more than twelve feet of water, and that on the Pacific is an open roadstead.

A Pacific railroad will in time be built within the limits of our own territory which will take most of the passengers, and light, valuable freight going to and coming from the Pacific States. An Isthmian transit route then must ultimately rely upon so much of the commerce, the actual business conducted upon the two oceans, as can be induced to



pass over it with passengers to and from all the shores washed by the Pacific and Indian oceans, excepting those passing over the Pacific railroad. It must be a business, a passenger and freight road, united with and terminating at safe, deep-water harbors, where freight of all kinds can be discharged from the largest kind of freighting and whaling ships and steamers directly on to cars, and from freight cars on board ship, if such harbors exist where they can be economically connected by a railroad across the Isthmus. Your committee, after such a careful examination as its means and time would permit, have come to the very gratifying conclusion that such a route does exist, terminating on each side of the continent on the shores of the best harbors that ever offered shelter to commerce. The harbor on the Atlantic side is the Chiriqui Lagoon with its interior harbors; it is about two hundred miles west from Aspinwall, and has until recently been almost entirely overlooked by American explorers for Isthmian routes by which to connect the trade of the two oceans. Perhaps the range of high lands which runs along the centre of this part of the Isthmus, dividing it into two plains, one gradually sloping to the Atlantic and the other to the Pacific, and sending up spurs of mountains thousands of feet above the level of the sea, led the voyagers along the Caribbean sea and Pacific ocean to conclude that nature had placed an impassable barrier to a connexion of the two seas by a railroad or carriage road between the harbors of Chiriqui and Golfito. The Chiriqui Lagoon, on the Atlantic, has long been known to the British government, and watched by it with care, no doubt in the hope of ultimately obtaining a foothold there. For some years her traders have exchanged British cotton goods, hardware, &c., with the inhabitants about the harbor, for sarsaparilla, vanilla, cloth, cattle, hides, &c. In 1839 Captain Barnet, of the English navy, visited the lagoon in the frigate Thunder, and made a thorough survey of its waters. His report and chart were published by the British government, and the accuracy of the survey has been endorsed by Lieutenant Almy of the United States navy, and others who have since visited the harbor. A copy of Captain Barnet's report, and one of his charts, have been examined by the committee. His work appears to have been thoroughly and no doubt accurately done. He has marked the depth of water in fathoms through all the entrances to the harbor, and what he supposed to be its most important parts. He says, in his report: "*Every part of the lagoon affords secure anchorage and contains harbors within harbors which will admit ships of the heaviest burden, where in many parts they might lie concealed by the side of the shore.*" The evidence that this harbor is one of the best on the whole Atlantic coast, in North or South America, is regarded as conclusive. It is easily identified on approaching it from sea, has water enough through its entrance and in its interior to float the largest ship that ever has been or is likely to be constructed. It is spacious enough to float the navies of the world, and vessels of the largest class may approach near the shore and in some places be moored in safety along its banks. The anchorage is good, and vessels of every class may ride in security protected from the ravages of the northers. Turtle and fish abound in the waters of the lagoon, and mountain streams of

pure fresh water empty into it, and, what is of great consequence to ship owners, there is reason for believing that none of those worms whose ravages are so destructive to the bottoms of vessels, are to be found in these waters near the mouths of the rivers emptying into it.

It is on the islands and shores of such a harbor that coal has been discovered, and an interest in it secured by the Secretary of the Navy, subject to the approval of Congress. For the quality and quantity of this coal, so far as yet ascertained, your committee refer to the report of the company's engineer, Mr. Manross, and to those of Lieutenant Almy, Chief Engineer J. W. King, and Assistant Engineer H. Newell, of the United States navy, by whom the coal was taken from the mines and tested on board United States steamers Wabash and Fulton.

The vessels of the Gulf squadron now receive their coal at Key West and Aspinwall. The average cost of coal per ton delivered at these points during the last ten years was \$11 60. The average cost of that delivered at ports on the Pacific was \$17 60 per ton; to these prices are to be added storage and the cost of handling, which will increase them respectively to \$14 and \$20 per ton. The quantity of coal estimated for the present year for the use of the Gulf squadron is 10,350 tons, which will cost, delivered, \$120,060. The same quantity taken from the mines at the Chiriqui Lagoon, under the contract herein referred to, would not cost over \$30,000—a saving of more than \$100,000 in a single year, and, as steamers will gradually supersede our sailing vessels, the saving will increase as this change goes on.

The quantity of coal estimated for the use of the Pacific squadron for the present year is 10,650 tons, which will cost on the Pacific, alongside of vessels, about \$213,000. Were the railroad and other enterprises contemplated by the Improvement Company now completed, the supply required by the Pacific squadron could be delivered at the harbor of Golfito for about \$7 per ton, and save to the government about \$130,000 per annum, with only the present number of steamships in the Pacific squadron. Golfito is on the Pacific, nearly opposite the harbors of the lagoon on the Atlantic. The Chiriqui Improvement Company have the right of way and the privilege of making a road connecting these two harbors, with grants of land along the route and around the harbors on each shore.

The Golfito is one of the best harbors on the whole Pacific coast. Its entrance is about half a mile wide, with an interior of six miles in length and one mile and a half in width. It is a fine basin of deep water into which the largest ships, deeply loaded, may enter safely and remain in perfect security from all danger of storm or norther. To examine and make a thorough survey of this harbor, the French government sent Captains Colombel and Lallier there in 1850. Their report and survey are very minute and satisfactory. In 1852, Admiral Pelion, of the French navy, was there in a ship-of-war, and testifies to the accuracy of the chart and report of Captains Colombel and Lallier. These reports are conclusive as to the great value of the Golfito as a secure and convenient harbor.

Here are two of the first harbors in the world; the one on the Atlantic and the other on the Pacific, nearly opposite each other, which can be connected by a railroad of only eighty miles in length. Here a

large part of the commerce and travel of the two oceans must, in time, meet and cross the continent. The commerce of the Pacific, its shores and islands, of Japan, India, and China, is increasing every year, and will not always be content to pursue its tedious way along the length of a continent to battle with the storms of Cape Horn; but when a good avenue is opened through a healthy country, connecting deep-water harbors where first class ships may enter with safety and discharge their cargoes into trains of cars on which merchandise can be taken from shore to shore at reasonable charges, much of the rapidly growing commerce passing from sea to sea will seek such a channel. The Chiriqui Lagoon and Golfito are harbors worthy of the vast inter-oceanic commerce destined at some day, not remote, to seek more ready markets and rapid exchanges through their waters. Nature has here anticipated human wants, and cleft the Cordilleras in twain, to create a level and direct passage between these two harbors, and left no swamps or stagnant pools intervening to load the air with poisonous vapors. It is in such harbors on the two great oceans, in the latitude where we most need them, that the United States are offered the perpetual use of naval depots for our ships, the free use of coal for the expense of mining, and other privileges for a sum so small as to bear but a slight comparative value to the great advantages secured in exchange. As a question of economy alone, the inducements are very strong for the government to secure without delay the advantages here offered. Two store ships are now kept near these two harbors, for the use of the Pacific and home squadrons; one at Panama and one at Aspinwall; besides which, no inconsiderable sums are paid for coal depots at these localities for the use of the steam vessels attached to these two squadrons. In Panama bay, for room on one island to land and leave coal for the Pacific squadron, the United States now pay *fifty cents per month* for each ton so kept, amounting to six dollars per ton per annum, and a deposit of several thousand tons is required there. If depots in the harbors of Chiriqui and Golfito are secured, these store ships may be withdrawn and employed upon other service, and the coal depots changed with great advantage and economy to these harbors. Besides being economical and advantageous to the government, the indirect aid it would furnish to an American company in their efforts to open their mines and road, and improve their possessions in New Granada, would enable them to compete with their more wealthy and powerful rivals, the Panama company, and thus cheapen and facilitate the travel and commerce between the two seas. It is a case where our government, by its partial endorsement of the enterprise, can lend its strong aid and encouragement to further the only great commercial highway across the continent which is supplied with safe and sufficient harbors on either side, and get more than a full equivalent in return.

Almost the entire trade of Mexico and South America has gone into foreign hands. We have not a solitary mail, passenger, or freight steam-vessel of any description running to Mexico, Central or South America, on either shore of the continent, excepting the boats of the Pacific Mail Steamship Company running to Aspinwall and Panama, and a line run by the same company, making monthly trips from Panama northward as far as Nicaragua, while the English have well

organized lines running direct from Southampton to the West Indies, and from thence to more than *sixty* Spanish-American ports on the Atlantic and Pacific coasts. These steamers all receive aid from the treasury of England for mail service, and the people of England receive an overflowing return for the money thus invested by the greatly increased trade which has followed the establishment of these lines from all Spanish-America to England. Mexico, our nearest neighbor, has a foreign trade amounting to \$54,000,000 per annum, yet our whole trade with her, both of imports and exports, amounts only to \$8,000,000 per annum. Central America has a foreign trade of \$12,214,263 per annum, but of this the United States get only \$267,389. South America has a foreign trade amounting, by the last published statement, to \$272,168,531 per annum, of which we get annually, of exports and imports, \$42,774,066. Here is a foreign trade carried on by sister republics south of us on this continent, amounting annually to \$338,382,794, of which but little more than *one-seventh*, \$51,041,455, comes to this country. The rest goes to Europe, and the most of it to England. The natural course for most of this trade is to the United States. With proper attention the largest portion of it might have been brought to this country, thereby aiding and strengthening every branch of industry. Mail steamers afford great facilities to mercantile communities, and wherever first established between countries divided by oceans, or, like Central and South America, having no communication with the great markets of the world by railroad, are always followed by a remunerative trade to the country starting and sustaining them. Had our government shown the liberality and sagacity that has ever characterized England in this particular a good share of the trade of this continent would now be in American hands, and affording a rich return to the whole country for the comparatively small aid for mail service which the establishment of lines of steamers would have required.

England has long been exploring, watching, and waiting to secure a suitable commercial transit from the Atlantic to the Pacific across the Isthmus, and at any moment would be glad to establish such a transit between the Chiriqui Lagoon and the harbor of Golfito, could she, or any citizens of that country, acquire such possessions and rights there as are now held by the Chiriqui Improvement Company. Her great trunk line of steamers to the Atlantic side of the central and southern portion of this continent would be run from Southampton to the harbor of Chiriqui to meet the mail, passengers, and freight brought by her Pacific steamers to Golfito, and by rail across the Isthmus to Chiriqui. These two harbors would form great commercial depots, and become the headquarters of her great steam power connected with this continent. But this route, with lands along the same amounting to two or three millions of acres, with harbor rights, &c., now belongs to and is in the hands of Americans, who are here asking for no gifts, no pecuniary aid in advance for contemplated mail service, but to induce their government, by its proper regard, to interest itself in their possessions, which must be considered as of national value. This providing in advance for an unlimited supply of coal in that latitude for our national ships, and for transportation



at reasonable rates from sea to sea, will probably prove one of the most economical measures which the government could adopt. Even should the company ask an advance on account of prospective mail service they would be merely following a very prominent precedent, for Congress acted upon this principle in establishing the mail routes by the way of Panama to our Pacific States and Territories, and advanced nearly half a million dollars to aid in building the steamers which were to carry the mails from New York to San Francisco by the Isthmus of Panama. But such is not their request; they are not here for loans or gifts, but to sell an almost invaluable privilege for a very small and inadequate money consideration, added to the vastly more valuable consideration of the good will and countenance of their government. The leading advantage which they expect to derive from a ratification of their contract is to be found in the fact that government vessels will seek the termini of their route for their supplies of coal, water, and other articles; and this fact, with the influence of their occasional presence, will give quiet and security to the possessions of the company, and tend to the peaceful and rapid improvement of that part of Central America, and guarantee it against illegal invasions from any quarter, or disturbance from filibustering adventurers either from our own or any other country. The possessions of the company being on the line between New Granada and Costa Rica, their road, and the improvement it would create, the police which New Granada requires them to keep up along the line, with the occasional visits of our national vessels to the harbors at its termini, will greatly tend to the peace and quiet of the borders of those two republics. In framing the bill the committee has been careful to guard against any encroachment upon the rights of New Granada from any quarter, and, as far as the action of the Improvement Company and the United States can lawfully go, to see that her sovereignty is protected in all its integrity.

The only steamship and railroad communication now existing between the United States and the Pacific ocean, consequently the principal communication with our Pacific States and Territory, is in the hands of wealthy monopolies. These monopolies being without competition, and having only one line of communication, they can and do, without opposition, establish such rates for the transportation of passengers, mails, and freight, as they may judge most advantageous to themselves, without consulting any interest but their own. That portion of the American public which has had intercourse by business or travel on the waters of the Pacific, its shores or islands, can best judge by the exorbitant charges they have been compelled to pay over the single route now in operation, whether the rapidly increasing commerce and trade of the Pacific, and the economy and convenience of the American people, does not now require another competing steamship line and a competing transit across the isthmus, and whether the stockholders in both lines, by imposing only a fair and just charge on the public, would not find their investment yielding returns amply remunerative, and as large as ought to be derived from the travelling and business community which would sustain them. The success of two competing routes, while that by way of Nicaragua was in operation, and the almost unprecedented pecuniary success of

the one now running, and the certain increase of business between the Atlantic and Pacific, give sufficient assurance that the route by way of the Chiriqui isthmus can be fully sustained.

Your committee recommend the passage of the bill herewith submitted.

## THE COMMITTEE APPEND THE FOLLOWING EXPLANATORY DOCUMENTS.

### *Abstract of privileges and titles to the possessions held by the Chiriqui Improvement Company.*

1. The Chiriqui road, in the province of Chiriqui, republic of New Granada.
2. Coal mines, in the province of Chiriqui, republic of New Granada.
3. Lands and harbors, in the province of Chiriqui, republic of New Granada.

#### 1. THE ROAD.

The constitution of the republic of New Granada concedes to the provinces the right to open and improve the roads ; to dispose of the public or common lands, of minerals, &c.

"The provincial legislature of Chiriqui, in use of the above faculties conceded to it by article X., of the constitution of the republic," granted to Ambrose W. Thompson an exclusive privilege, for sixty years, for improving in a solid manner the road which had been opened between the city of David on the Pacific and Bocas del Toro on the Atlantic.

The "improvement" was deemed one of "public utility ;"—as a consideration of the accomplishment thereof the legislature granted to Mr. Thompson the following, viz :

1. Power to construct offices, bridges, and buildings for the road.
2. Docks, basins, and edifices for the harbors.
3. To establish and collect rates of toll and charges upon persons, animals, and things, passing over or along the road, docks, basins, &c., &c.
4. Fifteen thousand fanegadas (about 30,000 acres) of the national lands north of the Cordilleras, and twenty-five thousand fanegadas (about 50,000 acres) of the common lands south of the Cordilleras, and twenty thousand fanegadas (about 40,000 acres) additional, making in all 120,000 acres of land.

These respective grants bind up the lands of the province until Mr. Thompson shall have made his selection.

5. Free introduction, exempt from tax or duty, of all persons and things belonging to the enterprise.

6. Total exemption from taxation of every kind upon the road, the persons, works, buildings, establishments, and vessels, belonging to the enterprise.

7. The right to establish and maintain a corps of police, for the preservation of order along the line of the road, during the term of the grant.

8. The franchises of the road cannot be transferred to any foreign government ; but Mr. Thompson having full power to assess and

collect tolls, has, under this, the right to dispose of *terms* for transit of any period, to governments or individuals.

9. The grant excludes any other road from being made across the province.

The Panama Railroad Company obtained what was deemed an exclusive grant to cross the Isthmus; but article 7 of the ordinance which establishes that grant specially excepts from this exclusion *any road then existing*, and it was assumed that the road from Bocas del Toro being *then* in use did not conflict with the terms; but, to guard against doubt, the grantee, Mr. Thompson, caused an application to be made by the governor of the province of Chiriqui to the president of the republic of New Granada, to annul the grant to Mr. Thompson, if it should prove illegal.

The president referred the subject to the attorney general of the nation, who, upon examining the laws, decided that the Chiriqui road "*is a highway which existed in the state of the Isthmus long before the grant for the construction of the railroad, and is so stated in the ordinance. It is, therefore, in the exception mentioned in the final part of article 7 of the contract entered into with the Panama Railroad Company, for which reason no step can be taken to annul said ordinance.*"

The legislature of the province of Chiriqui, in use of the faculties accorded to it by article 10 of the constitution of the republic and article 21 of the municipal constitution, granted, on the 14th October, 1855, to the Chiriqui Improvement Company, the right to extend their road from any point in the Province to any point on the lands granted to Santiago Agnew. (This enables the company to form a continuous road from the Chiriqui lagoon to Golfito.)

The same ordinance grants *the exclusive right* for a *telegraphic line across the Isthmus* and throughout the province of Chiriqui. The conditions of this ordinance have been complied with.

The first grant of the road privilege required the opening of certain portions of the road within a definite time. Within this term the whole length of the road has been opened to use, and the mails of the province now pass over it.

## 2. COAL MINES.

These are granted in accordance with article 13, law 10, part 4, book 5, of the Recopilation of New Granada, and by the faculties conceded in the Provincial constitution, article 29, paragraph 3.

The official acts under these laws put the grantees in actual possession and proprietorship. All the conditions imposed by the laws were complied with, as certified by the authorities of the Province.

The localities of the mines are as follows: Siege; Sierschick; Churia; Jinia; Chauquinola, with its branches and those of the Xixaola; Banana; Jones; Cultivation; Splithill; Sandy; Suariana; and Lunckoo, on the mainland of the lagoon, with Pope's island. These localities, together with the land grants, cover the entire shores and islands of the Chiriqui Lagoon.

The "cabildo," in an "ordinary session," and in use of the faculties conceded by article 29, paragraph 3, provincial constitution,

granted, for the purpose of aiding "the vast enterprise" of developing the mines, an addition of 25,000 fanegadas (about 50,000 acres) of lands belonging to the canton of Bocas del Toro; also the exclusive right to open and use for a period of twenty-five years a canal from the Chauquinola river to the waters of the lagoon.

The grants of coal mines and of the above land and canal were to J. A. Morel & Co., and by them sold to the Chiriqui Improvement Company.

### 3. LANDS ON THE PACIFIC AND HARBORS.

The Camara of the province of Chiriqui, in use of attribution 3d of article 3d of the law of June 3, 1848, granted to Señor Santiago Agnew the lands lying between the river Las Esquinas and the Rio Clara, extending backward from the shores of Golfo Dulce to the Cordilleras, comprising about two million acres of land, and including within the boundaries the superb harbor of Golfito.

The conditions of the grant were fulfilled by the grantee and certified by the provincial authorities.

Santiago Agnew executed a transfer of one half of this grant to J. Eugene Flandin, and also full powers of attorney to convey the other half.

Under this authority Flandin conveyed, by deed, to the Chiriqui Improvement Company his own and the rights of Agnew to the said lands.

Ambrose W. Thompson conveyed his rights, by deed, to the said company. These deeds were executed and acknowledged according to the laws of New Granada, duly recorded in the Province, and returned with proper certificates of record.

James Alfonso Morel and John Eugene Flandin conveyed, by deed, all their rights of coal mines and lands in the province to the Chiriqui Improvement Company. This conveyance was duly recorded in the province, and returned with proper certificates.

The grants and privileges are within the boundaries of Chiriqui. Costa Rica at one time set up a claim to the Chiriqui Lagoon, and to Golfo Dulce. A treaty was, however, made in 1857 between New Granada and Costa Rica, and the decree approving the treaty establishes the Dorces river, near Monkey point, on the Atlantic, and the line of the grant of lands made by Chiriqui, on Golfo Dulce, as the line of boundary between the two republics. This line places the whole of the Chiriqui Lagoon, and the whole of Golfo Dulce, within the limits of the province of Chiriqui.

"The Chiriqui Improvement Company" was incorporated by the State of Pennsylvania for the purpose of holding and representing the foregoing properties. The existence of the company has been recognized by the province of Chiriqui; her possessions have passed to record therein; and distinct grants have been made direct from the Province to the company. This gives it the same powers within the Province as it derives from the State of Pennsylvania. These powers are ample for any purpose of *proprietorship, trade, mining, manufactures, agriculture, colonization, making roads, navigation, &c., &c.*



From the ordinances, grants, transfers, and certificates, as described, it is apparent that the direct line of title to the Chiriqui Improvement Company is perfect.

The republic of New Granada, in separating from Spain, acquired the public lands, minerals, and privileges which, prior to the separation, vested in the crown. By constitutional provisions the Republic ceded these lands, minerals, and privileges to the Provinces.

One of these Provinces, Chiriqui, for the purpose of developing her resources, granted certain of the lands, minerals, and privileges to individuals. These grants are made in strict conformity, as shown by the original documents, to the constitution and laws of the Republic, and the constitution and municipal laws of the Province and its cantons. The right of transfer, sale, or assignment is conceded. They are consolidated by the individuals in transfers to the Chiriqui Improvement Company. These transfers are made in accordance with the laws of New Granada, and so certified by the constitutional authorities.

The Chiriqui Improvement Company is therefore the legal owner of all the grants, powers, possessions, and privileges which were held by the grantees, together with all the additional powers which are derived from the act of incorporation, and which powers, by their recognition in Chiriqui, have become as operative there as they are in the United States.

The special rights of the company in Chiriqui begin with the improvement and ownership of the road for sixty years, with power to levy and collect tolls; the absolute possessorship in fee of lands. Upon the Atlantic and Pacific coasts these lands encircle arms or bays, formed by indentations in the coast line of the oceans and of the harbors; and, having been granted with rights of colonization, cover rights or powers of local jurisdiction under Granadian laws, and positive control of interior harborage, with the rights to erect docks, basins, maritime stations, coal depots, &c.

The absolute ownership of the coal mines, with perpetual powers to mine and take out the coal.

The exclusive right to erect and use throughout the Province the electric telegraph.

The right to introduce, free of all obstructions, all colonists or settlers on the land, and to import, free of tax or duty of any kind, all articles or things required for their use.

The right to establish and maintain a police force for the preservation of order.

The general powers of the company are those of improving their possessions. They may, within the terms of their grants, sell or lease their privileges, lands, mines, docks, basins, or interior harbor-rights, open roads, erect mills and manufactories, develop their resources of property, and enter into contract for transportation over their road, or commute for uninterrupted passage over it, free of tolls. The company have therefore all the powers necessary to make a legal and binding contract with the United States, or any other government. These powers are derived from ancient royal grants of undisputable validity, and from more recent constitutional laws adopted by the people of

New Granada, since they have become independent of the crown of Spain.

The envoy extraordinary and minister plenipotentiary of the Granadian confederation near the United States has given a certificate to the following effect:

1. That the documents comprising the grants and Granadian titles are authentic and as such entitled to full faith and credit.

2. That the titles to the coal mines are regulated by Granadian legislation, and that the formalities prescribed by the laws have been fully observed.

3. That when these concessions and grants were made, Chiriqui was a Province of New Granada and was governed by a legislative chamber and governor.

4. That at that time the province of Chiriqui possessed two classes of lands, one the "*Indulto*" granted by the King of Spain direct to the Province in 1705, the other the "*Terras baldeas*" granted by the Republic to all the Provinces.

5. That the provincial legislature of Chiriqui had full power to make the grants, and the governor had the power to grant titles in virtue of the existing laws.

6. That by the federal constitution foreigners enjoy the same civil rights as citizens, and can buy, possess, and sell real estate.

This certificate has the signature of the minister and seal of the legation in due official form, and is possessed of all the authority of a state paper binding on the government of Granada, and removes all doubts which could arise as to the full authenticity and force of the grants, and it establishes the right of the company clearly and undoubtedly to control their property and to lease or sell their privileges within the terms of the grant, and subject only to the Granadian laws.

The United States, as a government, have already established the precedent of holding maritime stations in foreign countries, and acting under this fully recognized authority she has the right to purchase or lease such land as may become necessary for the support, supply, or protection of her navy. The use of the land which she has acquired by contract with the Chiriqui Improvement Company, and the use of the coal, will prove of incalculable value to her navy, and will afford that sure means of protection to her commercial marine which cannot be obtained in any other portion of the Isthmus or upon the coasts of the Pacific or Atlantic in South America.

The route across the Isthmus of Chiriqui differs from all others in its conditions of usefulness to the country. It is healthy, has deep and well protected harbors at its *termini*; there is no conflict of title or grantee claimant to it. The whole property in it, and in the inexhaustible coal mines is entirely in the hands of American citizens.

The lands were granted for the purposes of "public utility." The establishment of the road and of maritime stations, facilitates these purposes, and carries out fully the wishes of the people of New Granada. This is evidenced by the action of the Granadian senate when the Cass-Herran treaty was under consideration. It was then declared that "if the United States wanted depots for their navy or merchant

vessels, the Isthmus or its islands were as free to them as the ocean. Our laws do not oppose, but encourage it—that foreign citizens have in the whole of the Granadian territory the right to purchase or lease and possess any kind of real estate whatever.”

“In this point of view the New Granadian senate considers that for all practical purposes the 7th article (providing for a coal depot) might be immediately obtained by American citizens for the Navy Department without the aid of said article, and they consider the imperfect knowledge the American people possess of New Granadian laws is the cause why such depot had not been established long ago.”

This is conclusive as to the views of New Granada; and the precedent of the station in the Mediterranean settles clearly the authority of the United States to act for the benefit of her navy. In securing the right of way free of tolls, she provides independent mail facilities for the whole Pacific coasts of North and South America, which may hereafter become of vast benefit to the commerce of the country, and which, at the present time, without the additional and great benefit of the coal and maritime stations, would justify a much larger expenditure than that provided in the contract.

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### No. 1.

#### *Translation of grants and privileges.*

#### REPUBLIC OF NEW GRANADA.

DAVID, March 2, 1854.

SEÑOR GOVERNOR OF THE PROVINCE: The undersigned, attorney for Ambrose W. Thompson, respectfully submits: That it is necessary to the interests of his principal you should cause to be made by your secretary a certified copy of the “ordinance” of the legislature of the province, conceding to him an exclusive privilege for improving the road from this capital to the Lagoon of Chiriqui.

J. EUGENE FLANDIN.

GOVERNMENT OF THE PROVINCE OF CHIRIQUI,

*David, this 2d day of March, 1854.*

Let the copy which is solicited be expedited from this office.

SANTIAGO AGNEW.

I, Ramon Luna, secretary *pro tempore* to the government of Chiriqui, certify: That in the archives of this office, at present under my charge, there exists an original of the “ordinance” passed by the provincial legislature, in its extraordinary sessions of the month of February last past, granting an exclusive privilege to Ambrose W. Thompson, for improving the provincial road from David to the Lagoon of Chiriqui; the tenor of which is, to the letter, as follows:

*Ordinance of the 20th of February, 1854, granting an exclusive privilege to Señor Ambrose W. Thompson, for improving the provincial road from David to the Lagoon of Chiriqui.*

The provincial legislature of Chiriqui, in use of the faculties conceded to it, by article X. of the constitution of the republic, ordains :

ARTICLE 1st. An exclusive privilege for sixty years is hereby conceded to Ambrose W. Thompson, for improving in a solid manner, fit for the transit of wheeled vehicles, and maintaining in good condition, the provincial road opened more than fourteen years ago, between this city and Bocas del Toro ; which starts from this capital, crosses the Cordilleras, and terminates at Chiriqui Lagoon, on the Atlantic. The period mentioned in this article, shall date from the day when the improvement of the road shall be entirely completed according to the terms of this contract.

ART. 2d. For commencing the preparatory works on the road, twenty-four months are allowed, to date from the sanction of this ordinance ; and the whole must be completed within six years from the expiration of the aforesaid twenty-four months—and further, during the first year of the time allowed for the completion (6 years,) there must be finished conformable to article 1st, two Granadian leagues of road, starting from the Atlantic coast.

ART. 3d. So soon as the improvement of the whole road shall be concluded according to the terms stipulated in this ordinance, Mr. Thompson, or his representative, shall so inform the governor of the province ; so that he, himself, or by a commission appointed for the purpose, may, in company with said Thompson, his representative, commissioner or commissioners, proceed to inspect the work ; and judge whether or no the conditions of the contract have been fulfilled by the grantee ; and in the affirmative case, to declare him in full exercise of all the rights and prerogatives acquired under this privilege.

ART. 4th. During the period for which this privilege is conceded to Mr. Thompson, the provincial legislature of Chiriqui cannot give, or cause to be given, either privilege or permission to construct or improve any road from this capital or any other point to the Chiriqui Lagoon, on the Atlantic ; and this prohibition is to be effective even should the province change its name or organization.

ART. 5th. During the period of this privilege, Mr. Thompson has power to construct all such offices, bridges, docks, basins, and all and any such buildings and edifices which may be required for the enterprise ; and to establish all such tolls and charges as to him may seem meet and proper, upon all persons, animals, and things, which may pass over the road, or any portion of it ; having the full right, at his option, of throwing open to public travel any such portion or portions of the road improved so soon as he thinks advisable.

ART. 6th. No foreign troops or implements of war belonging thereto can pass over the road without permission from the general government of the republic.

ART. 7th. The following shall be carried free from toll or passage by the grantee : the troops and military stores, clothing, arms, animals,



&c., belonging to the general government of the republic, or to the province—the national and provincial mails—all public officers in the discharge of their duties—immigrants who may come for account of the government of the republic, or for that of the province, shall only be free from the *tolls*, paying their own passage across.

ART. 8th. In consideration of the difficulties to be overcome for carrying out the improvement of the road and the great advantages the province must derive from its completion, the enterprise is reputed one of “public utility,” and Mr. Thompson shall receive gratuitously—

1st. All the land required, up to 25 varas in width, along the line for the improvement of the road.

2d. All the land requisite for the establishment of buildings, and other necessary works, mentioned in art. 5; and further, all classes of materials, such as timber, stones, gravel, sand, or anything else of the same nature, which may be wanted for the improvement of the road or for keeping it in repair.

3d. Fifteen thousand fanegadas of land, north of the Cordillera, being of the national lands which the law grants to the province; and twenty-five thousand fanegades to the south of the Cordillera, being of the public or common lands of the province—all said lands at the selection of Mr. Thompson.

4th. Free introduction, exempt from duty or tax, to all persons and things belonging to the enterprise.

5th. Total exemption from taxation of whatever nature, whether provincial or parochial, during the existence of this privilege upon the road, the persons, works, buildings, establishments, and vessels belonging to the enterprise; but this exemption does not apply to persons or things foreign to the undertaking, which might come in the vessels above alluded to.

ART. 9th. The lands alluded to in paragraph 2d of article 8th are of the public common lands and of the public national lands belonging to the province; and do not apply in any case to those belonging to private individuals, which are to be obtained from their lawful owners by Mr. Thompson through the means of arbitration.

ART. 10th. So soon as the lands belonging to the province, and mentioned in paragraph 2d of article 8th, shall have been explored and measured, and so soon as notice of this fact shall have been given by Mr. Thompson or his agents to the governor of the province, the latter shall immediately put him in possession of said lands.

ART. 11th. Mr. Thompson shall receive the proper legal titles of property to the 40,000 fanegadas of lands mentioned in this ordinance in the following proportions: 5,000 fanegadas on commencing the preparatory works on the road; 10,000 fanegadas more when the two leagues of road alluded to in the final part of article 2d shall be completed; 10,000 fanegadas more when one-half of the road shall be improved, and the remainder when three-quarters of the road shall be completed. But he can designate the totality of these lands, and have them measured, so soon as he may think fit.

The governor of the province shall put Mr. Thompson in possession

of these lands according to this contract, having previously ascertained their correct measurement.

ART. 12th. Mr. Thompson or his representative is to pay the cost of the measurement alluded to in the preceding article.

ART. 13th. Once this privilege accepted by the attorney of Mr. Thompson, the legislature of Chiriqui cannot make any further concessions of public lands, until all those conceded by this ordinance shall have been selected by the grantee.

ART. 14th. When the road is completed Mr. Thompson shall make, at his expense, a full inventory, in duplicate, of all the improvements, works, buildings, &c., upon the road; which shall be handed to the governor of the province; and this same formality shall be repeated every five years during the period of the privilege; always adding any further improvements which may have been made.

ART. 15th. Any infraction or default on the part of Mr. Thompson in complying with any or all of the conditions of this grant, produces revocation of the privilege; and it must then be declared annulled by the provincial legislature, or, during its recess, by the governor of the province; it always being understood that the default or infraction be not caused by any act or acts of the general government of the republic, or of the provincial authorities; in either of which cases the province of Chiriqui binds itself only to remove whatever difficulty may have been thrown in the way of the enterprise, it always being understood that the removal of said difficulty comes within its legal functions; but should the default proceed from war, or any unforeseen accident, then the grantee shall be entitled to an extension of time, at the judgment of the legislature, and according to the motives which may have occasioned said default.

ART. 16th. In the event of the legal forfeiture by Mr. Thompson of the privilege granted by this ordinance, then the province of Chiriqui shall enter in full possession of the road, with all its improvements, without any indemnity being given said Thompson.

ART. 17th. The full time for which this privilege is given having expired, the province of Chiriqui shall enter in full possession of all the properties belonging to the enterprise, that is, the wharves, bridges, toll-houses, offices, docks, storehouses, &c., and all the things belonging to the road, without Mr. Thompson receiving any indemnity whatsoever; he being bound to deliver over the road, with all its appurtenances, in the same state in which he has kept it during the period of the privilege.

ART. 18th. A. W. Thompson is fully authorized to transfer the interests, properties and privileges, &c., which by this grant he receives, to any person or persons, company or companies, with the sole condition that the road shall be improved, but in no case can he transfer it to any foreign government.

ART. 19th. Any case of doubt as to the meaning of any article of this contract shall be settled according to the laws, by arbitration.

ART. 20th. Twenty thousand fanegadas more of the public lands of the province are hereby granted to Mr. Thompson on the following conditions:

1st. Mr. Thompson shall maintain at his expense the corps of police

necessary to the preservation of order along the road during the period of the privilege; and to this effect he shall arrange with the governor of the province.

2d. Mr. Thompson shall pay to the province 2 per cent. on the net proceeds of the road, payable every six months into the provincial treasury at David.

Mr. Thompson shall receive the titles of property to these said lands, in the same proportion mentioned in article 11, for the 40,000 fanegadas already granted.

ART. 21st. This ordinance once accepted by the attorney of Mr. Thompson, the former privilege granted on the 31st December, 1852, to the same Mr. Thompson, becomes annulled and revoked.

ART. 22d. Let this ordinance, in duplicate, be passed to the governor of the province, so that before him and his secretary the attorney of Mr. Thompson may affix to it his acceptance.

Given at David this 14th day of February, one thousand eight hundred and fifty-four.

The President of the Legislature,

J. A. VILLAR.

The Secretary,

IGNACIO HERRERA.

GOVERNMENT OF THE PROVINCE OF CHIRIQUI,

*David, February 20, 1854.*

Let this be executed and published.

SANTIAGO AGNEW. [SEAL.]

The Secretary,

RAMON LUNA.

I, the undersigned, J. Eugene Flandin, attorney of Ambrose W. Thompson, and in his name, in presence of the governor of the province and of his secretary, accept this ordinance, with all its conditions and obligations.

David, the 20th day of February, 1854.

J. EUGENE FLANDIN.

This is a true copy of the original, which is in the archives of this office, under my charge, and to which I refer in case of necessity. And in accordance with the orders of the governor of the province, I execute this present copy, at David, this 3d day of March, 1854.

RAMON LUNA, *Secretary.*

The governor of the province of Chiriqui certifies that Señor Ramon Luna is truly the secretary to this government; that the foregoing signature is truly his, and the same which he habitually affixes to all public and private documents.

David, this 3d day of March, 1855.

SANTIAGO AGNEW. [SEAL.]

*Ordinance of the provincial legislature of Chiriqui, amending the one of February 20, 1854, which granted a privilege to Ambrose W. Thompson to improve the road to Bocas del Toro :*

The provincial legislature of Chiriqui, in use of the faculties conceded to it by article 21 of the municipal constitution, ordains :

ARTICLE 1. The term of twenty-four months granted to Mr. A. W. Thompson for commencing the preparatory works on the road from this capital to Bocas del Toro, by article 2d of the ordinance of February 20, 1854, shall only date from the 1st of September of this year.

ART. 2. The ordinance of 20th February, 1854, which granted to Mr. Thompson the privilege for improving the above-named road, is thus amended.

DAVID, June 21, 1855.

The President,

AUGUSTIN JOVANE.

The Secretary,

J. N. VENERO.

GOVERNMENT OF THE PROVINCE OF CHIRIQUI,

David, June 22, 1855.

Let this be executed and published.

SANTIAGO AGNEW.

The Secretary,

NICOLAS LOPEZ.

PROVINCE OF CHIRIQUI.

REPUBLIC OF NEW GRANADA,

Department of the Interior, Bogota, July 1, 1855.

SECTION 2, NO. 3.

*To the " Jefe Superior " of the State of Panama :*

The governor of the ancient province of Chiriqui, in an official despatch of February 23, number 2, remitted to this department a copy of the ordinance passed by the legislature of that province, granting an exclusive privilege to Mr. Ambrose W. Thompson for improving the provincial road from David to the lagoon of Chiriqui ; the said ordinance was handed to the attorney general of the nation, so that he might examine it and ascertain if it infringed any of the rights of the Panama Railroad Company. He has reported as follows :

" I beg to acknowledge receipt of your despatch under date of 3d instant, enclosing a copy of the ordinance expedited by the legislature of the ancient province of Chiriqui, in its extra session of last year, granting an exclusive privilege to Mr. Ambrose W. Thompson for improving the provincial road from David to the lagoon of Chiriqui,



and requesting me to take steps for having said ordinance annulled if I considered it in contravention to article 7 of the contract with the Panama railroad as approved by Congress. The road to which the above-cited ordinance refers is a highway which existed in the state of the isthmus long before the grant for the construction of the railroad, and it is so stated in the ordinance. It is therefore included in the exception mentioned in the final part of article 7 of the contract entered into with the Panama Railroad Company, for which reason I consider no step can be taken to annul said ordinance."

I quote the above for your better guidance, and for whatsoever ends it may be necessary.

Your obedient servant,

PASTOR OSPINA.

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*Ordinance of 20th October, 1852, granting a privilege to Señor Santiago Agnew for colonizing at Golfo Dulce.*

The Camara of the province of Chiriqui, considering the petition of Señor Santiago Agnew for establishing a colony at Golfo Dulce, and in use of attribution 3, article 3, of the law of June 3, 1848, upon municipal administration, ordains:

*Article.*—A privilege is hereby conceded to Señor Santiago Agnew for colonizing with native and foreign immigrants the lands lying between the river known as Las Esquinas and the river "Clara," or "Agua Clara," in the centre of Golfo Dulce, on the Pacific coast, with the sole condition that the inhabitants remain subject to the government of New Granada and to the authorities of the province; the aforesaid lands being a part of the province, and comprehended in the "Indulto" from the King of Spain.

Sect. 1. The grantee shall commence the founding of this colony within sixteen months from the date of the sanction of this ordinance.

Sect. 2. So soon as Señor Agnew shall commence to people the said lands he shall give notice to the government of the province, so that the necessary authorities and functionaries may be established in said locality.

Given at David this 18th day of October, 1852.

The President of the Legislature,

JOSÉ DEL CARMEN DE VILLAMAR I ORNA.

The Secretary,

MANUEL NICOLAS DE SANTIAGO.

GOVERNMENT OF THE PROVINCE OF CHIRIQUI,

David, October 20, 1852.

Let this be executed and published.

ESCOLASTICO ROMERO. [SEAL.]

The Secretary,

IGNACIO BELTRAN.

I, José Maria de Alba, secretary to the government of the province of Chiriqui, certify that in the archives of this office, at present under my charge, there exists the original of the preceding ordinance, and that the foregoing is a true and faithful copy of said original.

JOSE M'A DE ALBA.

DAVID, November 13, 1854.

The governor of the province of Chiriqui certifies that Señor José Maria de Alba is truly the secretary to this government, and that the foregoing signature is really his, and the same which he habitually affixes to all public and private documents.

David, the 13th day of November, 1854.

SANTIAGO AGNEW. [SEAL.]

*Ordinance of December 31, 1852, fixing the limits of the privilege granted to Señor Santiago Agnew for colonizing at Golfo Dulce.*

The provincial camara of Chiriqui, considering the petition of Señor Santiago Agnew, by which he solicits an explanation as to the exact limits of the privilege which was conceded to him for establishing a colony at Golfo Dulce, upon the common or "Indulto" lands belonging to this province, and in use of the 3d attribution, art. 3, of the law of June 3, 1848, regulating municipal administration, ordains:

*Article.*—The privilege conceded to Señor Santiago Agnew, for establishing a colony, by the ordinance of October 20 last, must be understood as having for—limits, to the territory which is therein conceded to him, a direct line drawn from the mouth of the river "de las Esquinas," in the centre of Golfo Dulce, to the summit of the Cordillera, being the boundary line with Costa Rica; and a parallel line drawn from the mouth of the Rio "Claro," on the Pacific, to the summit of the Cordillera, which is also one of the boundaries of the grant made to Messrs. Whiting & McDowell, by the ordinance of 22d of October last.

Given in the hall of sessions of the camara, at David, this 31st day of December; 1852.

The President,  
AUGUSTIN JOVANE.

The Secretary,  
MANUEL N. DE SANTIAGO.

GOVERNMENT OF THE PROVINCE OF CHIRIQUI,  
David, December 31, 1852.

Let this be executed and published.

ESCOLASTICO ROMERO. [SEAL.]

The Secretary,  
RAMON LUNA.

I, José Maria de Alba, secretary to the government of the province of Chiriqui, certify that in the archives of this office, at present under my charge, there exists the original of the preceding ordinance, and that the foregoing is a faithful transcript of said original.

JOSÉ M'A DE ALBA.

The government of the province of Chiriqui certifies that Señor José Maria de Alba is truly the secretary to this government; that the foregoing signature is really his, and the same which he habitually affixes to all public and private documents.

David, the 13th day of November, 1854.

SANTIAGO AGNEW. [SEAL.]

UNITED STATES CONSULATE, *Panama, New Granada.*

I, Archibald B. Boyd, commercial agent for the United States of America at the port of Panama, republic of New Granada, do hereby certify that Santiago Agnew, whose name appears to the within instruments of writing, is governor of the province of Chiriqui, republic of New Granada, within the limits of this consular jurisdiction, and that his acts as such are entitled to perfect faith and confidence. In testimony whereof, I hereunto sign my name and impress the seal of this consulate of Panama, this 11th day of December, A. D. 1854.

ARCH. B. BOYD,  
*Commercial Agent.*

GOVERNMENT OF THE PROVINCE OF CHIRIQUI,  
*David, 4th of May, 1853.*

*Resolved*, That in consideration of the accompanying memorial and the list of persons appended thereto, Señor Santiago Agnew proves that he has commenced to people the lands which were granted to him by the camara of this province, by ordinances of 20th of October and 31st of December of the year last past, for the purpose of colonizing them with native and foreign immigrants; I hereby declare the petitioner in full possession of the aforesaid privileges. Let information be at once given to the alcalde of the district of Alanje, under whose jurisdiction, for the present, the said colony comes, so that he may appoint a commissary or commissaries, as they may be required; and let him inform this government of what may be required for the political and judicial government of said colony, either in relation to its actual state, or to the enlarged wants of the population as it may increase.

ROMERO.

In the absence of the secretary, the first clerk,

RAMON LUNA.

I, José Maria de Alba, secretary to the government of the province of Chiriqui, certify that in the archives of this office, at present

under my charge, there exists the original of the preceding resolution, and that the foregoing is a true and faithful copy of the said original.

JOSE M'A DE ALBA.

DAVID, *November 13, 1854.*

The governor of the province of Chiriqui certifies that Señor José Maria de Alba is truly the secretary to this government; that the foregoing signature is really his, and the same which he habitually affixes to all public and private documents.

SANTIAGO AGNEW. [SEAL.]

DAVID, *November 13, 1854.*

UNITED STATES CONSULATE, *Panama, New Granada.*

I, Archibald B. Boyd, commercial agent for the United States of America at the port of Panama, republic of New Granada, do hereby certify that Santiago Agnew, whose name appears to the foregoing instrument of writing, is governor of the province of Chiriqui, republic of New Granada, within the limits of this consular jurisdiction, and that his acts as such are entitled to perfect confidence and credit.

In testimony whereof, I hereunto sign my name and impress the seal of this consulate, at Panama, this 11th day of December, A. D. 1854.

ARCH. B. BOYD,  
*Commercial Agent.*

In the city of David, capital of the province of Chiriqui, on the 13th day of the month of November, 1854, before me, Juan Balmori, notary public of the canton of Alanje, being witnesses, the persons hereinafter mentioned, appeared Señor Santiago Agnew, resident of this place, to me personally known, he being of age, and said: "That the camara of this province conceded to him, in the year 1852, various lands of the 'Indulto,' belonging to this province, for purposes of colonization; that in all the said grants and concessions he recognizes as partner John Eugene Flandin, citizen of the United States, and resident of New York, to whom he has ceded the full half of all the rights and titles derived by him under said grants. That there are no other parties interested in the said partnership but the said Flandin. And in virtue of said partnership he gives full and ample powers, in all that may be necessary and requisite, to the aforesaid John Eugene Flandin, so that representing him personally, his rights, interests, and acts, he may carry out the objects of colonization, with agricultural and industrial laborers, on the aforesaid lands, by all the means at his command; to defend and promote all the interests of the association, judicially and extra-judicially, before authorities or tribunals, and wherever in right it may be requisite. Also giving by these presents full, ample, and unrestricted faculty to make any and all contract or contracts, sale or sales, that may be required; and to sign all documents or instruments which may thereto correspond, giving them the same strength and credit as if signed by the association, or by the undersigned individually; hereby ratifying all such



acts done for him and in his behalf, giving full power in the premises, and conferring upon the aforesaid John Eugene Flandin the full, free, and entire administration of the business, with faculty to substitute any person or persons of his confidence. Binding himself hereby with his property, present and future, to all that may be done under this power to the fullest extent; and to give this act full force and legality, hereby paying the corresponding registry duty, which is as follows:

"On the 13th day of November, 1854, there has been paid in by the notary public, Juan Balmori, four reals, in the name of Señor Santiago Agnew, for the duty of registry to a special power of attorney, for business purposes, which he is about executing in favor of Mr. John Eugene Flandin, citizen of the United States of America, residing in New York; this entry being proved by the annexed signature of the payer.

"SANTIAGO.

"JUAN BALMORI."

"The above figuring in part 53, page 162, of the book of accounts for the present year.

"MANUEL NICOLAS DE SANTIAGO."

The foregoing is a copy of the document which appears on page 25 of the book of records and annotation which belongs to this office, and to which this is referred if necessary.

In testimony of which, I so state it, and sign it, being witnesses, Mess. Francisco Esquivel and José Maria Tribaldos, able citizens, who also sign in my presence, which I certify.

SANTIAGO AGNEW.

Witnesses:

FRANCISCO ESQUIVEL.

JOSÉ MARIA TRIBALDOS.

Before me,

JUAN BALMORI,  
*Notary Public.*

This first certified copy is taken from the original on file in the book of records of contracts and public acts, made before me, the undersigned, during the current year, being numbered 32, and to which I refer. And at the request of the petitioner, I extend this present certified copy on two sheets of stamped paper of the first class, at David, this 14th day of November, 1854.

JUAN BALMORI,  
*Notary Public.*

The above is registered in the registry office of the canton of Alanje, at folio ten of the book of records, for the present year, this fourteenth day of November, 1854.

RAFAEL JOSÉ CARRISO.

I, Domingo de Obaldia, first judge of the superior tribunal, of the judicial district of Chiriqui, certify, in due form and according to

right, that Mess. Juan Balmori and Rafael José Carriso, whose names appear attached to the foregoing documents, are, respectively, the first, notary public, and the second, register of public documents in this province; both exercising their official callings, to which they have been appointed by the properly constituted legal authorities.

And at the request of the interested parties, I extend this present certificate, at David, this 14th day of November, 1854.

DOMINGO DE OBALDIA.

The governor of the province of Chiriqui certifies that Señor Domingo de Obaldia is truly the first judge of the superior tribunal of this province; that the signature which is appended to the foregoing certificate is really his, and the same which he habitually affixes to all public and private documents.

DAVID, *November 14, 1854.*

SANTIAGO AGNEW. [SEAL.]

U. S. CONSULATE, *Panama, New Granada.*

I, Archibald B. Boyd, commercial agent for the United States of America at the port of Panama, in the republic of New Granada, do hereby certify that Santiago Agnew whose name appears to the foregoing instrument of writing, is governor of the province of Chiriqui, in the republic of New Granada, within the limits of this consular jurisdiction, and that his acts as such are deserving of full confidence and credit.

In testimony whereof, I hereunto sign my name and impress the seal of this consulate, at Panama, this eleventh day of December, in the year of our Lord 1854.

ARCH. B. BOYD, *Commercial Agent.*

The tract of land on Golfo Dulce, granted to Santiago Agnew, covers about one million acres of land and an immense extent of cocoa-nut trees and valuable woods.

## TITLES TO THE COAL MINES AND LANDS.

REPUBLIC OF NEW GRANADA.

No. 249.

GOVERNMENT OF THE PROVINCE OF CHIRIQUI,  
*David, August 16, 1854.*

Annexed you will please find the title of property which I have this day expedited in your favor to the coal mines denounced by you in the localities known as "Siegi," "Churia," "Jinia," and "Changuinola," with its branches, and those of the river Xixaola.

You will please acknowledge the receipt of the same.

I remain your obedient servant,

SANTIAGO AGNEW.

Messrs. J. A. MOREL & Co.

*The Governor of the Province of Chiriqui:*

At the petition of Messrs. J. A. Morel & Co., foreign citizens, in relation to a denouncement, which they previously made to this government, of certain coal mines existing in the district of Bocas del Toro, asking for the legal title of property to the same in accordance with article 13 of law 10, part 4, book 5, of the recopilation of New Granada; the aforesaid parties being in full possession of said mines, having complied with all the formalities and legal requisites, and considering—

1st. That the “Jefe Politico” of the canton of “Bocas del Toro,” at the time of said denouncement, and acting under the instructions of this government, dated 28th of October, 1851, did post bills for three consecutive weeks without any one appearing as claimant to the said mines, which fact he communicated by an official report of December 29th of the same year.

2d. That according to the declaration of the commissioner appointed by the aforesaid “Jefetura,” accompanied by two witnesses, in default of the public notary, the memorialists, on every one of the veins of coal of “Sierschick,” “Churia,” “Jinia,” and “Changuinola,” and of four other creeks without known names, branches of the Changuinola, have sunk shafts one vara and a half in width and ten varas in depth.

3d. That there being no neighbors, the commissioner, executing the orders of the “Jefetura,” after having measured on each of the principal veins mentioned the three “pertenencias” of six hundred varas each according to the law, fixed the limits and boundaries, and put the memorialists in legal possession.

4th. And lastly, that in conformity with article 8 of the constitution of the republic, foreigners enjoy the same civil rights and guarantees as Granadians. Therefore this government, in accordance with the requirements of the beforementioned article 13, expedites this present title, by which Messrs. J. A. Morel & Co. remain full, legitimate, and unreserved owners in property and possession of the above-named coal mines.

Given at David, this 16th day of August, 1854.

SANTIAGO AGNEW. [SEAL.]

The Secretary,

JOSE M'A DE ALBA.

The above title is registered in the registry office of the canton of Alanje, folio six of the book of records for the present year, this 17th day of August, 1854.

RAFAEL JOSÉ CARRISO.

## REPUBLIC OF NEW GRANADA.

No. 293.

GOVERNMENT OF THE PROVINCE OF CHIRIQUI,

*David, October 5, 1854.*

I herewith hand you the title of property which, under date of the 3d instant, I have expedited in your favor, to the coal mines denounced by you in the localities known as "Banana," "Jones," "Cultivation," "Splithill," "Sandy," "Suarian," and "Lunckoo."

You will please acknowledge receipt of the same.

I remain your obedient servant,

SANTIAGO AGNEW.

*The Governor of the Province of Chiriqui:*

Whereas Messrs. J. A. Morel & Co. have fully complied with the requirements of the decree of this government under date of August 4, 1854, (and which is inserted below,) according to the official report of the alcalde of "Bocas del Toro," dated 23d of September last, No. 9, (and which is also herein inserted,) and which documents in due succession are as follows:

GOVERNMENT OF THE PROVINCE OF CHIRIQUI,

*David, August 4, 1854.*

In consideration of the petition previously presented by Messrs. J. A. Morel and J. Eugene Flandin, under the style and firm of J. A. Morel & Co., denouncing the existence of various veins of coal in the creeks known as "Banana," Jones, Cultivation, Splithill, Sandy, Suarian, and Lunckoo, affluents of the Chiriqui lagoon, in the district of Bocas del Toro, this government, in conformity with what is prescribed by article 13 of law 10, part 4, division 5, of the Recopilation of New Granada, decrees—

1st. That the alcalde of Bocas del Toro shall post up bills during three consecutive weeks, indicating the present denouncement.

2d. That within the ninety days following this resolution the memorialists shall have sunk, on each vein of their denouncement, a shaft one and a half vara in width, and ten varas in depth.

3d. That so soon as this shall have been done, the memorialists shall give notice to the alcalde of Bocas del Toro, who, himself, or by a commissioner, shall immediately inspect the mines, their extent, location, and other circumstances; this examination must take place in the presence of two witnesses.

4th. That so soon as the memorialists shall have faithfully complied with the above obligations, they shall be immediately put in possession, and notice of said act given to the neighboring miners, if there



be any, at the same time measuring the pertenencias and fixing the limits and boundaries.

5th. And lastly, that a report shall be made to this government upon the whole transaction, to have its legal effects.

SANTIAGO AGNEW.

The Secretary,  
JOSÉ M'A DE ALBA.

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REPUBLIC OF NEW GRANADA.

No. 9.

ALCALDIA OF THE DISTRICT,  
*Bocas del Toro, September 23, 1854.*

SEÑOR GOVERNOR: I have the honor to inform you—

1st. That this alcaldia has given course to the orders contained in the decree of this government, under date of 16th August last, relative to the formalities to be gone through for putting Messrs. J. A. Morel & Co. in possession of the therein mentioned coal mines.

2d. That bills were posted for three consecutive weeks without any opposition from any quarter.

3d. That according to the declaration of the judge commissioner, appointed by this alcaldia, and accompanied by two witnesses, the memorialists, on every one of the veins of their denouncement, have sunk shafts one and a half vara in width, and ten varas in depth.

4th. That there being no neighboring miners, the judge commissioner, after having measured on each of the principal veins the three pertenencias, according to law, fixed the boundaries and limits, and put the memorialists in legal possession.

I communicate this in compliance with the orders contained in article 5 of the aforesaid decree.

May God have you in His holy keeping.

JUAN JOSÉ LOPEZ.

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And whereas, by article 8 of the constitution of the republic, under date of May 21, 1853, all foreigners who may be in the Territory of New Granada enjoy the same civil rights and guarantees as Granadians; and in accordance with what is provided by article 13 of law 10, part 4, book 5, of the Recopilation of New Granada, I hereby expedite to Messrs. J. A. Morel & Co. this present title, by which they remain full, legitimate, and unreserved owners, in property and possession, of the aforesaid coal mines.

Given in David this 3d day of October, 1854.

SANTIAGO AGNEW. [SEAL.]

The Secretary,  
JOSÉ MARIA DE ALBA.

The above title is registered in the registry office of the canton of Alanje, at page nine and over leaf of the book of records for the current year, this 5th day of October, 1854.

RAFAEL JOSÉ CARRISO.

I, Esteban Gary, notary public of this district of "Bocas del Toro," certify that the preceding documents are, to the letter, exact copies, without interpolation or omission, of the two original title deeds to the mines, expedited by the government of this province, in favor of Messrs. J. A. Morel & Co.; that I have carefully compared them, and verified them, and extend this present notarial copy, which may serve in all necessary cases in default of said originals.

Bocas del Toro, this 18th day of October, 1854.

ESTEBAN GARY.

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ALCALDIA OF THE DISTRICT.

I, Juan José Lopez, alcalde of this district of Bocas del Toro, certify that Esteban Gary is in full exercise of the functions of notary public in this district, and that the signature attached to the foregoing certificate is truly his, and entitled to full faith and credit.

Given at Bocas del Toro this 19th day of October, 1854.

JUAN JOSÉ LOPEZ.

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CONSULATE OF THE UNITED STATES,  
*Port of Colon, (Aspinwall,) New Granada.*

I, George W. Fletcher, consul of the United States of America for the port of Colon (Aspinwall) and its dependencies, republic of New Granada, do hereby certify that the signature above recorded is truly that of Señor Juan José Lopez, alcalde of Bocas del Toro, and as such is entitled to full faith and credit.

In witness whereof, I hereunto affix my hand and consular [L. s.] seal this 20th day of November, A. D. 1854.

GEORGE W. FLETCHER.

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REPUBLIC OF NEW GRANADA.

No. 154.

GOVERNMENT OF THE PROVINCE OF CHIRIQUI,  
*David, July 2, 1855.*

I herewith enclose the title which constitutes you owners of the coal mine situated on "Pope's Island," in the district of Bocas del Toro.

I also enclose an authenticated copy of an ordinance passed by the legislature of this province at its extraordinary session of last month,

by which the time for commencing the works on the road, from Bocas del Toro to this place, is extended.

I remain your most obedient servant,

SANTIAGO AGNEW.

Messrs. JAMES A. MOREL & Co.

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GOVERNMENT OF THE PROVINCE OF CHIRIQUI.

In consideration of the petition of Messrs. J. A. Morel and Co., foreign citizens, relating to the denouncement made by them of a new coal mine they have found on "Pope's Island," in the district of Bocas del Toro, a part of this province, and which petition, and the acts pertaining thereto, performed by the alcalde of the district, are, to the letter, as follows:

BOCAS DEL TORO, *December 5, 1854.*

Peter Shepherd, jr., a resident of this place, respectfully states: That as attorney for Messrs. J. A. Morel & Co., and by virtue of the full powers conferred upon him for that purpose, he respectfully informs you of the discovery of a new coal mine in the locality known as "Pope's Island," and forwards by this opportunity the required specimens of coal in proof of said discovery, and with the intention that the ownership thereof shall be declared in favor of Messrs. J. A. Morel & Co., begging that you will act in the matter in conformity with this petition.

PETER SHEPHERD, JR.

To the GOVERNOR OF THE PROVINCE OF CHIRIQUI.

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GOVERNMENT OF THE PROVINCE OF CHIRIQUI.

*David, January 8, 1855.*

Considering the preceding petition made by Peter Shepherd, jr., as attorney for J. A. Morel & Co., by which he denounces the existence of a coal mine in the spot known as "Pope's Island," in the district of Bocas del Toro, this government, acting in accordance with what is prescribed by art. 13 of law 10, part 4, book 5, of the Recopilation of New Granada, decrees—

1st. That the alcalde of Bocas del Toro shall post notices of this denouncement for three consecutive weeks.

2d. That within ninety days after the passage of this decree the petitioners must have sunk on the vein thus denounced a shaft one and a half vara in width and ten vara in depth.

3d. That when this shall be done, the petitioners shall give notice thereof to the alcalde of Bocas del Toro, so that he himself, or by a responsible substitute, shall examine the work, ascertain the position of the vein, and other circumstances; this shall be done in the presence of two witnesses.

4th. That if the petitioners comply with the conditions required, they shall immediately be put in possession, informing the neighbors,

if there be any, and measuring the "pertenencias," and fixing the boundaries.

5th. That a full report of these acts shall be sent to this government to have its legal effects.

SANTIAGO AGNEW.

The Secretary,  
JOSÉ M<sup>a</sup> DE ALBA.

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REPUBLIC OF NEW GRANADA.

No. 6.

ALCALDIA OF THE DISTRICT,  
*Bocas del Toro, June 6, 1855.*

*To the Governor of the Province:*

I have the honor to inform you—

1st. That this office has carried into full effect the orders of the government of Chiriqui, as contained in the decree of 8th of January last, in relation to the acts to be performed for putting Messrs.

J. A. Morel & Co. in possession of the coal mine therein referred to.

2d. That bills were posted for three consecutive weeks, and no claimants appeared.

3d. That according to the declaration of the judge commissioner appointed by this alcaidia, and accompanied by two witnesses, the petitioners had in due time sunk a shaft on said vein of one and a half vara in width and ten varas in depth; that there being no neighbors, the judge commissioner, after having measured the three "pertenencias" according to law, fixed the boundaries, and placed the petitioners in full, legal possession.

4th. I communicate this in accordance with article 5 of said decree. May God have you in His holy keeping.

The Alcalde,  
PETER SHEPHERD, JR.

Thus all the requisites of the law being complied with, this government, in accordance with the dispositions of article 13 of law 10, part 4, book 5, of the Granadian Recopilation, grants this present title, and concedes to Messrs. James Alfonso Morel & Co. the full and unreserved property to the above-mentioned coal mine.

Given at David this 2d day of July, 1855.

SANTIAGO AGNEW. [SEAL.]

The Secretary *pro tem.*,  
NICOLAS LOPEZ.

The above title is registered in the registry office of the canton of Alanje, at folio 3 and over leaf of the book of records for the present year, this 2d day of July, 1855.

The Registrar,  
NICOLAS LOPEZ.



## CABILDO OF THE DISTRICT OF BOCAS DEL TORO—ORDINARY SESSION.

*Acuerdo of July 17, 1854, upon concession of vacant lands, and a privilege for a canal to Messrs. J. R. Morel & Co.*

The cabildo of the district of Bocas del Toro, in use of the faculties conceded to it by article 29, paragraph 3, of the provincial constitution, and considering—

1st. That Messrs. James Alfonso Morel and John Eugene Flandin, under the firm of J. A. Morel & Co., requiring lands for the development of the coal mining operations they have commenced in this district, solicit a grant of the 25,000 fanegadas of vacant lands which belong to this district, in conformity with the law of Congress of 12th April, 1851.

2d. That the vast advantages which this district must derive from the full development of so important a branch of industry as that of coal mining, impel this "cabildo" to aid with all its resources the successful accomplishment of such vast enterprises, which must advance its well being, and, in accordance with articles 27 and 28 of the provincial constitution, enact—

ARTICLE 1. The 25,000 fanegadas of vacant lands belonging to the canton of Bocas del Toro, under the law of Congress of April 12, 1851, are hereby conceded in full property and possession to Messrs. James Alfonso Morel and John Eugene Flandin, under the firm of J. A. Morel & Co.

ART. 2. Said 25,000 fanegadas of land are situate between the creeks known as "Banana" and "Splithill," the river "Culebra," and the "Cordilleras."

ART. 3. Messrs. J. A. Morel & Co. obligate themselves to pay into the treasury of the district the value of one dime for each ton of coal (of 2,000 pounds) which shall be exported; and when the quantity so exported shall have reached ten thousand (10,000) tons, then they are to pay only half a dime per ton.

ART. 4. The above specified payment shall be made regularly every six months to the treasurer of the district; and Messrs. J. A. Morel & Co., or their representative, shall keep a book, open to the inspection of said treasurer, wherein the quantity of coal exported shall be regularly recorded.

ART. 5. In consideration of the payment hereinabove recited, Messrs. J. A. Morel & Co., or their representatives, shall be exempt from all district or municipal taxes, of whatever nature they may be, whether upon houses, stores, vessels, machinery, works, and persons; and in short, upon all and everything that may be necessary to their enterprise.

ART. 6. Acting under the provisions of article 29, paragraph 4, of the provincial constitution, an exclusive privilege for twenty-five years, to open a communication from the river Changuinola to this lagoon, is hereby granted to the same Messrs. J. A. Morel & Co., and they shall have full right of property and possession, as well as an exclusive right of way to said communication, during the time of this privilege, as specified; after which it shall revert to the district.

ART. 7. The exclusive privilege given by this "cabildo," under date of 1st May, 1852, to the same Mr. A. Morel, and for the same purpose, is hereby revoked and annulled.

ART. 8. An original proof of this "acuerdo" shall be handed to Messrs. J. A. Morel & Co., to serve them as title deed in case of necessity.

Given at Bocas del Toro this 14th day of July, 1854.

President of the Cabildo,

PETER SHEPHERD, JR.

The Secretary,

GASPAR CERVERA.

ALCALDIA OF THE DISTRICT,

*Bocas del Toro, July 17, 1854.*

Let this be complied with and published.

The Alcalde,

JUAN JOSÉ LOPEZ. [SEAL.]

ALCALDIA OF THE DISTRICT.

I, Juan José Lopez, alcalde of this district of Bocas del Toro, hereby certify that in the archives of this alcaldia, at this day under my charge, there exists an original of the "acuerdo," passed by the "cabildo" of the district during its sessions of the month of July last past, making certain concessions to Messrs. J. A. Morel & Co., the tenor of which is, to the letter, like the preceding document, which is an exact and faithful copy of the said original, and to which at any time it may be referred; and at the request of Messrs. J. A. Morel & Co. I extend this present certified copy, at Bocas del Toro, this 9th day of October, 1854.

JUAN JOSÉ LOPEZ.

I, Geo. W. Fletcher, consul of the United States of America for the port of Colon (Aspinwall) and its dependencies, republic of New Granada, hereby certify that the signature above recorded is truly that of Señor Juan José Lopez, alcalde of Bocas del Toro, and as such is entitled to full faith and credit.

In witness whereof, I have hereunto affixed my hand and the consular seal this 20th day of November, A. D. 1854.

[Consular Seal.]

GEO. W. FLETCHER.

[Translation.]

GRANADIAN LEGATION IN THE UNITED STATES.

The undersigned, envoy extraordinary and minister plenipotentiary of the Granadian confederation, near the government of the United States, in view of the inquiry directed to this legation by Mr. Ambrose

W. Thompson, dated the 4th of the present month ; and upon examination of the documents to which reference is made, namely :

1. A certified copy of the ordinance issued by the provincial legislature of Chiriqui, on the 20th of February, 1854, granting the exclusive privilege to Mr. Ambrose W. Thompson to improve the provincial road from David to the Chiriqui lagoon ; and

2. The original papers, showing the right of property in the coal mines, Siegi, Sierschick, Jenia, Changuinola, Xixcola, Banana, Jones, Cultivation, Split Hill, Sandy, Suariana, and Luncoo, issued in favor of Messrs. Santiago, Alfonso, Morel and Company, by the governor of Chiriqui, on the 16th of August and 3d of October, 1854, and legally transferred to the company, denominated the "Chiriqui improvement Company."

I certify :

1. That the aforesaid documents are authentic, and as such are entitled to full faith and credit.

2. That the titles to the lands granted by the ordinance mentioned are regulated by Granadian legislation ; and in order to have granted the titles to the coal mines above mentioned, they have observed the formalities prescribed by law 10, part 4, section 5, of the Granadian code ; this opinion, in both its parts, being in accord with the written opinion given by Mr. Justo Arosemens, a Granadian lawyer of acknowledged ability.

3. That when these concessions and grants were made, "Chiriqui" was a province of New Granada, and as such had a provincial legislature, or chamber, and a governor.

4. That at that time the province of Chiriqui possessed two classes of lands—those called the "Indulto," which were granted by the King of Spain to the ancient province of Veragua, in 1705 ; and one part of these belonged to the province of "Chiriqui" when it was created, in 1849 ; and the "Tierras Baldeas," or *vacant lands*, granted by the Congress of the republic to all the provinces.

5. That the provincial legislature of Chiriqui had full power to make these grants of land, and such privileges as those made in favor of Mr. Thompson ; and the governor of the province had power to grant titles to the mines in the form in which they were granted in favor of Messrs. Santiago, Alfonso, Morel & Co., in virtue of the existing law 10, part 4, section 5, of the Granadian code, and

6. That by the federal constitution foreigners enjoy in the Granadian confederation the same civil rights as their own citizens ; being, therefore, in the same condition that they are, to buy, to possess, and to sell real estate. Besides, the policy of the Granadian government has always been very liberal, and it has not hesitated to facilitate and protect, as far as possible, the commerce of all nations, thus, at the same time, stimulating that of the republic.

In addition to the foregoing certificate, I avail myself with great pleasure of this opportunity to give testimony, that from information, official and private, worthy of all belief, or from my own information, I am of opinion that there are few countries in the world that possess so many elements of prosperity and wealth as that part of the State of Panama which forms the province of Chiriqui. In proof of this

it is sufficient to mention its interoceanic position, the variety and comparative softness of its climate, which is most salubrious, especially in the mountainous parts, which enjoy a very fresh and bracing temperature, and in the southern part is almost populated, level, covered with grass and flowers, and abounding in flocks and herds; whilst the northern part only awaits the hand of civilized man to become no less healthful and desirable, and perhaps still better populated.

The mines of gold from which Christopher Columbus carried with him specimens to Spain, yet remain to testify the existence of that precious metal in the gorges and ravines of the mountains; the mines of copper, of iron, of coal, and the various mineral springs which exist between the town of David and Bocas del Toro; the gum elastic, the pearls and pearl oysters, and the tortoise, furnishing the tortoise shell, abound on those coasts, in which there is already considerable commerce; the richest and most valuable dye-woods, timber for building, and especially ship timber, and resinous and medicinal woods, besides all those resources to make living easy and cheap. The most abundant game invite the chase, and all the fruits and products of the intertropical zone, from the papa, Indian corn, and garden products, to that of cocoa, the plaintain, the arrowroot, the cacao, the coffee, the cotton, the sugar-cane, besides many other things to which other countries now owe their wealth and prosperity; the facility of communication, especially on the Pacific side, whilst Panama and Punta Arenas furnish convenient and secure markets for the stock and all the articles of food from Chiriqui, there being between the town of David and Panama a level road, with abundance of water, and well populated—a people simple in their manners and habits, and principally engaged in agricultural industry and pastoral husbandry, and, therefore, peaceful and moral; and, finally, the magnificent entrance to this beautiful region, which Providence has arranged and the Granadian government has opened to all nations, is through Chiriqui lagoon and Admiral bay, an immense double bay, with fertile shores, one hundred and twelve miles in circumference, into which no less than twelve rivers empty themselves. Numerous harbors, among which there are two of the most commodious and secure in the world. Near to these are the coal mines, whose titles I have already certified, and they alone in the present epoch would be sufficient to render prosperous, as well as an object of desire, any country which may possess them.

A country which, in only that part of it which is known, can show such natural advantages and resources, cannot do less than to reward most prodigally the peaceful emigrant who may employ in it his capital, his intelligence, and his activity; and it is not necessary to be a prophet to predict with certainty that this region will be, at no distant day, one of the richest marts in the world.

I must add that all that I have here written of Chiriqui is confirmed by the labors of the scientific commission, which, by order of the Granadian government, are now concluding, under the direction of General Cordazzi, a chorographical and topographical description of the confederation.

I cannot omit speaking of one circumstance more, which occurs to



me, in favor of Chiriqui, and that is its contiguity to a neighboring people, laborious, peaceful, and well accredited as are those of Costa Rica, which owes to its own efforts, since its independence, all its prosperity.

These two countries are evidently destined by nature to mutually assist and enrich each other.

P. A. HERRAN. [SEAL.]

WASHINGTON, *April 8*, 1859.

No. 3.

ATTORNEY GENERAL'S OFFICE, *May 11*, 1859.

SIR: On the 14th of March last I addressed to you a communication concerning the title which the Chiriqui Improvement Company had to the property in New Grenada, which they proposed to sell to the United States government. It was then my opinion that they had not shown a right to convey the property, for the following reasons:

1. There was not sufficient evidence that the improvement company had been chartered and organized.
2. There was no authentic copy of any grant by the province of Chiriqui to the improvement company.
3. There was no evidence that the sovereign power, in which the property vested by public law, had ceded it to the province of Chiriqui.
4. There was no evidence of any law authorizing foreigners to hold property like this.
5. The mining rights did not appear to have been denounced under the sanction either of the supreme government of New Granada, or the government of Panama.
6. No copy of the constitution was produced, nor any other authority shown to the provincial legislature of Chiriqui, either to authorize a denouncement of the mining rights, to concede the land, or grant the privilege of a roadway across the isthmus.
7. The government of the United States could not, without violating the law of nations, take and hold possession of such property within a foreign country.

Upon a re-examination of this title in the light of new evidence which accompanies your last letter, I think that the first six objections formerly existing, may be now considered as disposed of.

The Chiriqui Improvement Company shows that it was organized; the original grant from the province is produced and authenticated; and the right of the province to make, and the capacities of the grantees to take the grants in question, are established by the certificate of the New Granadian minister at Washington.

The objection still remaining is, that the United States cannot take exclusive possession of the property without the consent of the New Granadian government. You are to judge how far this consent has been given, or what necessity there may be for further negotiation.

In the paper written by General Herran he does not allude to this point.

It must also be remembered that this grant of a roadway does not include any right to make a railroad.

I am very respectfully, yours, &c.,

J. S. BLACK.

Hon. ISAAC TOUCEY,  
*Secretary of the Navy.*

No. 4.

REPUBLIC OF NEW GRANADA, STATE OF PANAMA.

PREFECTURE OF THE DEPARTMENT,  
*David, June 22, 1856.*

SEÑOR ALCALDE OF BOCAS DEL TORO: By your despatch No. 22 I received the agreeable intelligence of the safe arrival in your district of the scientific corps so anxiously expected.

As this enterprise is entirely linked with the prosperity of the country, and is the commencement to the realization of all the hopes of the people, it must be considered as the initiation of the movement towards civilization, which is to bring to these regions that intellectual and industrial culture which has so much advanced the people of the north and of Europe. With this view, we have to congratulate ourselves, as well as all parties interested, with the happy inauguration of the labors of the Chiriqui Improvement Company.

I do not wish to confine myself to words, but to acts, and shall be ready to do all and everything within my attributions to facilitate and protect all the operations of the aforesaid company.

I remain your obedient servant,

J. N. VENERO, *Prefect.*

REPUBLIC OF NEW GRANADA, STATE OF PANAMA.

ALCADIA OF THE DISTRICT,  
*Bocas del Toro, September 17, 1857.*

SEÑOR PREFECT OF THE DEPARTMENT OF CHIRIQUI: I have great satisfaction in announcing to you that the Chiriqui Improvement Company have, some time since, commenced the work on the road, and are pushing it forward vigorously in conformity with the principles they hold; there are several gangs of men employed at various points on the line of the road clearing away and selecting the best grades, and I am satisfied that very shortly the travel from this point to David will be regularly made in one day.

The company is at work on the most difficult part of the route, that is through the forests on the Atlantic side.

I have considered it my duty to announce to you officially these facts, so important for this section of our Isthmus.

I remain your obedient servant,

GEORGE C. SHEPHERD,

*Alcalde.*

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At the petition of Mr. Ambrose Thompson, representative of Mr. Ambrose W. Thompson, and of the Chiriqui Improvement Company, *I certify and declare under oath in the most solemn manner and in due form:*

First. That the document, the copy of which is hereto annexed, is official, faithful, and exact in all its contents, and is the same that in my office of alcalde, in this district of Bocas del Toro, then in the department of Chiriqui, has been sent to the prefect of the said department, written and signed with my hand and name under the said date of September 17, 1857.

Second. I declare that in consequence of the works undertaken and executed by the said company to open the road in conformity with the stipulations of the privilege conceded to Mr. A. W. Thompson by the legislature of Chiriqui, which privilege has been revised and approved by the attorney general of the republic, the prefect of the department has ordered that the mail should pass by this route, in virtue of which the improvement company of Chiriqui has placed, gratuitously, at the northern terminus of the road, a boat to transport regularly the mail carriers and bag to the Island of Bocas del Toro, the principal town of this district.

Third. I declare that since then has been transported by the said route, and frequently, loads of the products of the country, even with beasts of burden.

Fourth. I likewise manifest that from the beginning of the year 1856, Mr. J. A. Morel, then agent of the said company, undertook the necessary explorations with a sufficient force of workmen to discover and trace the first line of improvement from the lagoon of Chiriqui to David; that for a long time they were opening tracks and small roads; that in the same year the company likewise sent two American engineers with other foreign workmen; that they continued the preparatory works, and that from the beginning of the year 1857, the engineers and foreigners, with the co-operation of Messrs. Morel and Peter Shepherd, and with workmen of Chiriqui, finally realized tracing definitely the line from the north to the south of the department. They made transitable for carriages the two leagues determined by the second article of the said privilege.

Fifth. I declare likewise that it was manifested officially to me that in the month of January, 1858, Mr. J. A. Morel, as agent of the Chiriqui Improvement Company, notified the prefect that the road was actually opened and adequate for transit in conformity with the privileges; said notification was recorded in the office of this mayoralty, then in my charge; also that on the 23d of the same month and year, the prefect of Chiriqui acknowledged the official receipt of the infor-

mation and authorized the regular transportation of the mail by the same route improved by the said company.

*In faith of all which I swear to its truth.*

GEORGE C. SHEPHERD.

BOCAS DEL TORO, *March 30, 1860.*

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GRANADIAN CONFEDERATION, STATE OF PANAMA.

*Mayoralty of Bocas del Toro, Department of Colon.*

For the account of Mr. Ambrose Thompson, as the attorney of Mr. Ambrose W. Thompson and the Chiriqui Improvement Company, has been presented at this office the copy of a document to be legally acknowledged by Mr. George Cory Shepherd, ex-mayor of the district, and this last having appeared the day of this date before me, and my secretary, and after undergoing the formalities required by law, has given the declaration at the foot of the said document written and signed with his hand and name in my sight and that of my secretary, which I ratify and certify in accordance.

Let it remain to the interest of the said Ambrose Thompson.

JUAN JOSÉ LOPEZ.

MANUEL AYAZA, *Secretary.*

BOCAS DEL TORO, *March 30, 1860.*

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We, the undersigned citizens of Bocas del Toro, in the department of Colon, (formerly Chiriqui,) in the republic of New Granada, having read the declaration hereto joined, and made the 30th day of March, 1860, before the alcalde or mayor of Bocas del Toro, by Don George Cory Shepherd, former alcalde, as therein stated, hereby voluntarily make this statement, that the matters certified to in the said declaration by Mr. Shepherd, are matters of fact and common notoriety, and as such well known to all the citizens of this community, and to their truth we bear testimony.

And furthermore, we hereby state that it is universally admitted, both in this town and the south side of the isthmus, that Mr. Ambrose W. Thompson, through his agents and representatives, has more than fulfilled the requirements of his privilege.

Edw'd Peterson, merchant.

S. Torrey, captain.

Peter Shepperd, ship-builder.

J. A. Morel, proprietor.

Charles Thompson, house-carpenter.

Richard Wenham, trader.

Gilbert Bernard, planter.

Edward Shepherd, ship-carpenter.

Jeffery Brown, planter.

Walter H. Johnson, trader.



Thomas James, captain.  
 Robert Humphries, captain.  
 Robert Lucton, trader.  
 Sam'l E. Brown, Wesleyan minister of Bocas del Toro.  
 Robert T. Christie, trader.  
 William G. Thompson, carpenter.  
 Wm. Humphries, master mariner.  
 P. Humphries, carpenter.  
 Robert Dickson, planter.  
 Francis Brown, planter.  
 A. Thomas, builder.

I the undersigned, alcalde of Bocas del Toro, New Granada, do hereby certify that the signatures of the persons whose names are attached to the foregoing statement are known to me ; that they are those of the persons represented, and that the said persons are the most respectable citizens of Bocas del Toro, and to their representations full faith and credence are due.

JUAN JOSÉ LOPEZ,  
*Alcalde.*

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AGENCY OF THE CHIRIQUI IMPROVEMENT COMPANY,  
*Bocas del Toro, January 2, 1858.*

I have the honor of informing you that the line of route from David to the Atlantic ocean is now fully open, admitting the passage of loaded animals.

The postmaster at Bocas del Toro has informed me that, with your approval, it is his intention to have the mail carried over this route, in preference to the old and difficult passage heretofore employed by the mail carrier. I have offered him the free use of a boat for the transportation of the mail from our beautiful terminus in Chiriqui lagoon to the island of Bocas del Toro.

The northern part of the route, that is through the mountain passes, does not form one third of the whole distance from ocean to ocean ; the remainder, as you know, is a savannah, dry during the whole year, and the traveller can now easily make the journey from David to the Atlantic.

Although during the three coming months the weather on the north side will not be so fine as on the south, yet the continued work of improvement on the whole line (which, now that it is open, is of so much consequence) will go on uninterruptedly.

I remain your obedient servant,

J. A. MOREL, *Agent.*

SEÑOR PREFECT OF THE DEPARTMENT OF CHIRIQUI.

REPUBLIC OF [Stamp seal of the State] NEW GRANADA,

*State of Panama.*

PREFECTURE OF THE DEPARTMENT OF CHIRIQUI, No. 11,  
*David, January 23, 1858.*

I have received with great satisfaction the news of the opening of the road from this city to the Atlantic, and that it can be traversed with loaded animals.

The prefecture approves of what has been done by the postmaster of Bocas del Toro, in relation to sending the mail over this route in preference to the former one used, thus avoiding the rapid currents of the Guasame river, which always caused delays. The government thanks you, therefore, for your voluntary offer to carry the mail from the terminus of your road to the island of Bocas del Toro.

As I have to make an official report upon this route, I hope you will inform me at what time you can accompany me on said examination.

I remain your obedient servant,

AUGUSTIN JOVANÉ, *Prefect.*

Mr. J. A. MOREL,

*Agent of Chiriqui Improvement Company.*

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No. 5.

REPORT OF PROFESSOR NEWTON S. MANROSS,

*To the President and Directors of the Chiriqui Improvement Company:*

GENTLEMEN: In pursuance of your instructions, the party under my charge proceeded to examine the deposits of coal in the vicinity of Chiriqui lagoon, as soon as the necessary preparations could be made after our arrival at Bocas del Toro. Our first expedition embraced the entire circuit of the lagoon, including the localities of Split Hill, Endeavor creek, Secretary, and Pope's island. A second short trip was made to Cultivation creek, on Shepherd's lagoon. The third was to the Changuinola river. A fourth excursion to the Cricamola was undertaken in consequence of a report that coal was formerly discovered and used there.

I shall describe the deposits in the order of their geographical position, commencing from the east, and prefacing the descriptions by some general remarks on the character of the formations in which the beds occur. The report of Mr. Bonner, my assistant and companion, has been consulted in the preparation of this.

From the most easterly point examined, that at Secretary, to the most westerly, the Changuinola river, there is an unmistakable uniformity in the character of the rocks which line the coast. They consist of sandstones and limestones, more or less indurated, and vari-

ously inclined by intruded ridges of trap. The sandstones are mostly thick bedded, and nowhere assume the form of shales. These formations are narrower towards the east, being confined to the promontories of Valiente Point and Saddle Hill, and to the islands in their vicinity. They were nowhere detected on the southern or mainland side of Chiriqui lagoon. That shore is occupied quite down to the sea, by mountains of gneiss, syenite, and other ancient rocks. At the western extremity of the lagoon the sandstone formations join the mainland, and from that point to the Changuinola river they exhibit a constantly increasing development in breadth and thickness. At Valiente Point the breadth of the formation appearing above the sea is from two to three miles. On the Changuinola it is not less than ten. In some parts the strata attain an elevation of more than one thousand feet above the level of the sea. The length of the tract included in these limits is nearly fifty miles. All the islands of Admiralty bay belong to the same formation. There was no lack of evidence to fix the age of the strata throughout this entire distance. Many fossil shells were found of species now existing in the adjacent waters; and trunks of trees in a partially carbonized state occurred both above and below beds of coal. They were apparently of the same varieties as are now growing over the spot. Leaves of dicatyledonous trees, and fruit of a modern species of palm, were taken from the soft strata, in contact with one of the coal seams. None of the peculiar fossils of the older coal formations were detected in these rocks. These evidences, together with the lithological character of the rocks, are sufficient to show that the formations are not of greater age than the older tertiary, and that the coal of this region is therefore similar to that so extensively worked in France, Belgium, and many parts of Germany.

The most easterly point at which coal was observed was at Secretary, a place on the interior shore of Valiente promontory.

There three separate beds crop out upon the beach. The most easterly, and, at the same time, the highest in the series, appears in the face of a cliff some forty feet high. A complete section of this bed is afforded by the freshly broken precipice. It is situated about twenty feet above the water. It has a thickness of about four feet, and is exposed for a length of ten or twelve yards. A second and thicker bed is exposed at the edge of the water, a little distance west of the former. The upper surface of this body has been laid bare by the action of the sea, and may be seen under the water, several yards from the shore. It slopes upwards into the land at an angle of about twenty degrees. Judging from the slope of this bed, as compared with that of the overlying rock and soil, it must crop out within one hundred yards of the sea, but its outcrop could not be detected on account of the dense covering of soil and vegetation. A pit sunk through it at high-water mark showed it to be six feet in thickness, although the lower two feet of this was much mixed with sand. A tunnel was driven a few feet inland in the bed, without bringing to light any new characteristic.

The third and lowest bed is situated also at the edge of the water, about a hundred yards west of the second. It is two and one-half feet

thick. All of these beds, as also the enclosing strata, have a direction parallel to the shore of the lagoon. Their positions are indicated on the accompanying map. The coal of these veins is of a soft and bright quality, and extremely interesting, showing the considerable thickness which the seams may attain in this formation.

Following the course of the formations westward, in the direction of Saddle Hill, coal is again met with on Pope's island. It occurs there in a bed of from five to six feet thick, being exposed, as usual, by the action of the sea. It is of a much harder and better quality than that at Secretary. Its course is northwest, with a dip of twenty degrees northeast. This bed bears marks of disturbance, being bent and reduced to a foot in thickness, where it appears in the cliff above the water. Whether it regains its thickness, and continues on in the direction of its strike across the island, is a question which can only be decided by the operations of an adequate mining force drifting in upon it, and sinking shafts on its line of bearing. If continuous, it will have a length of about two miles upon the island, and a "back" of from fifty to one hundred feet. The superior quality of this coal and its favorable location render this the most important point in that vicinity for further explorations.

Still further west, on the promontory of Saddle Hill, several beds of coal occur at distances of from half a mile to a mile from the inner shore of that promontory. This range of beds includes the localities of Split Hill, Two Serpents creek, and Endeavor creek. It covers an extent of four or five miles in length. In the first of these localities three beds of coal were seen, cropping out in the beds of streams. They varied from one to two feet in thickness. In the second locality three beds were also distinguished; one of them had a section of four feet. These two localities are about two miles apart. At a somewhat greater distance occur the beds at Endeavor creek, the most westerly locality upon Chiriqui lagoon. Here, also, three beds were detected, varying from three to five feet in thickness. They, like the others, have a direction parallel to the shore, and dip towards it. In this vicinity at least twelve outcroppings of coal were observed in the different creeks and gullies, all of them, however, referable to the three beds above described. It may be safely presumed that the coal seams are continuous, as the enclosing strata certainly are, over the entire space included by the localities last named. The coal is, however, of a soft character, and inferior to that of Pope's island, or the localities hereafter to be described.

Another locality of coal was examined on Cultivation creek, about one mile from the shore of Shepherd's lagoon. The seam is about one foot in thickness, and exhibits a quality superior even to that of Pope's island. It is hard, brilliant, and compact, and would undoubtedly answer well for purposes of steam navigation. The small size of this particular vein precludes the hope of its being in itself of value, but its good quality, together with its position, in strata thoroughly indurated, and rising to the height of several hundred feet above the level of the sea, encourages the belief that other and larger beds will be found in this vicinity. I would particularly recommend this region for further examination.

No other localities of coal are known to the westward of Cultivation creek till we arrive at the deposits on the Changuinola river. The intervening space is *unquestionably occupied* by the same formations, as is shown by the form and direction of the mountain chains, but it has *never been explored for coal beds, although certain to contain them.*

The first locality visited upon the Changuinola is situated at a place called Jinia. A single seam is exposed at intervals, along the bed of a creek, for a distance of several hundred yards. The coal is hard and brilliant, and remarkably free from impurities. Although the thickness of this bed where exposed is too small for successful working, the fact that it maintains its thickness, direction, and quality uniformly over so considerable a space, is a highly encouraging feature in the formations. Still higher up the river we encountered the largest beds of good coal which have as yet been discovered in this locality. They are exposed in the bed of a branch of the Changuinola, called by the Indians "Sierschick." The seams cross the stream obliquely, and appear in either bank, as well as for a short distance up the hills. On the east bank there are seven veins, varying from one foot to eighteen inches in thickness. They are distributed through a mass of strata forty feet thick. On the west bank the seams of coal are assembled into three veins, of from two to three feet each, occupying, with the intervening rock, a thickness of twenty feet. The dip of the bed is a few degrees east of north, and amounts to thirty degrees. The spot is four hundred and thirty-four feet above the level of the sea. A bed of coal was also visited, several miles further up the creek, at an estimated elevation of seven hundred feet above the sea. A land-slide had covered the spot, so that only a few fragments of the vein could be seen; but these were of the same bright and hard quality as the places lower down. The coal of the larger beds described above is hard and compact, possessing considerable brilliance in its fracture, and sufficient firmness to bear transportation. It has a specific gravity of 1.27, and contains from 6 to 7 per cent. of ash. It burns freely, with a strong flame, but does not melt. The ash is grayish white, without any tendency to form clinker. The analysis of it, in the possession of the company, shows that it compares favorably with many of the coals of the older formations. I have no doubt this coal will answer the purposes of steam navigation, as well as nearly all the requirements of the arts and manufactures. The three seams described as occurring so near each other at the principal locality, (of the Changuinola,) if united in one, would form a bed sufficiently thick to be taken out with advantage. The irregularity of the included beds of rocks seems to promise that they may unite, or at least approach near enough to be worked as a single bed.

It is to be regretted that the limited time allowed for the explorations, the insufficient force of miners, and the unfavorableness of the season, rendered it impossible for our party to make such a thorough examination of the extent and continuity of the more promising of these veins as their geographical position and vast financial and commercial importance demands. Sufficient has, however, been done to show that considerable quantities of coal of good quality do exist at the localities described; while the vast extent of country over which



the containing rocks have been shown to extend leaves ample room for the expectation that the discovery of other and still larger beds will reward the enterprise of your company.

#### GOLD DEPOSITS AT CATABELLO.

In the course of the excursion up the river Cricamola we visited and examined a region where gold was reported to exist. We saw there several small streams, from all of which we obtained gold by panning. The yield was about forty cents per bushel. According to Mr. Bonner's estimates the deposits examined contained about three thousand cubic yards of such sand. The streams formed a part of the headwaters of the river Catabello. No opportunity was had of examining the other streams which flow from the same range of hills, but gold would doubtless be found in all of them. The streams rise near the summit of a ridge so situated that the gold could not have been transported from any remote place. It might, undoubtedly, be easily traced to its source in the underlying rock. Many grains of platina were found among the particles of gold. Considering the probability that these gold deposits extended over a considerable space, as well as their satisfactory richness were examined, I recommended Mr. Morel to secure by denouncement the entire tract, including all the headwaters of the Catabello, and that river itself as far down as there would be any prospect of its yielding gold. A small sample of the gold accompanies this report.

#### OBSERVATIONS ON THE LINE OF THE PROPOSED ROAD.

After prosecuting the explorations upon the Atlantic coast as long as the season permitted, it was decided to cross to the southern side, thereby obtaining a complete section of the rocks of the isthmus, and at the same time viewing the reported coal deposits of the Pacific coast.

Finding, on arriving near David, that the parties who had discovered coal upon the Golfo Dulce were absent, and that in consequence no explorations could be undertaken with advantage in that quarter, we returned to the Cordillera, and ascended a peak called the Boquete. This peak commanded a view of both seas, of the lagoon of Chiriqui, of David, and of the entire line of the proposed road, from ocean to ocean. The summit of the peak is sixteen miles in a direct line from the Chiriqui lagoon, at the mouth of the Robalo river. Its place is indicated in the accompanying map. It is, consequently, much nearer the Atlantic than the Pacific coast. On the southern side a most remarkable slope of ground extends from the foot of the Boquete down to the shore of the Pacific.

I have never seen anything in the natural conformation of a country more singular than this inclined plane, or more singularly adapted to the construction of a road. The average ascent is not more than three feet in a hundred, and this is continued with the utmost regularity quite up to the summit pass. The plain is separated from the mountains on either side by rivers running in deep ravines, which catch

the drainage of the hills and leave the slope unbroken by streams or gullies. Only three bridges would be required from the harbor at David to the summit of the Cordillera.

The sketch of this region by Dr. McDowell, which was shown to me in the company's office, is a faithful representation of this remarkable natural grade.

In that sketch, it will be seen how the smooth and even tongue of land which I have been describing stretches up between and beyond the highest mountains of the isthmus range. The double-pointed peak in the centre of the picture is the Boquete, from which my observations were made, and the little sketch which accompanies this taken.

This sketch represents the view from the summit of the Boquete, looking northward to the lagoon of Chiriqui on the right, and the islands of Bocas del Toro on the left. It will be seen from it that a curved valley extends from the pass at the foot of the Boquete quite down to the lagoon of Chiriqui, at the mouth of the Robalo. A road along this valley from the mountain to the sea would not be more than nineteen or twenty miles in length. One-half of this would be laid in the almost level lower valley of the Robalo. The other nine or ten miles would be mountain road, and would require to be cut in the sides of the valley, and, of course, to follow its winding. It will be seen from this slight description of the country that a large part of the work of constructing a road across the isthmus at this point has already been done by the hand of nature.

On the southern side a natural inclined plane of most remarkable character winds up from the shore of the Pacific to the summit of the Cordillera. On the Atlantic side a river valley affords another equally advantageous grade for half the remaining distance; while the upper ravines of the same river offer a passage to the summit, where the Pacific slope terminates. I estimate the length of the road at fifty-five miles. Three-fourths of the entire distance is thus graded by nature. For the construction of a road, the isthmus is therefore practically narrower at this point than at either of the other places where roads have been built or projected. Terminating as this route does, in magnificent harbors on either coast, it might easily be made one of the great transit routes from ocean to ocean. Two-thirds of the distance will be through a country affording natural pasturage throughout the year, and having a soil unsurpassed in fertility. The other third will open a forest abounding in timber of various kinds, some of which have long been known to commerce, while others equally valuable, but growing in the interior, only wait for an outlet to have their value acknowledged.

The very best materials for macadamizing are found in abundance along the entire line of the road. Its construction would be comparatively inexpensive; and I am fully convinced that such a road, with the unlimited supply of horses, oxen, and mules which the immense tracts of natural pasture belonging to the company would produce and maintain, at a trifling cost, would compete successfully, even in the transportation of heavy merchandise, with either of the transit routes

now open or to be opened. It should become one of the great channels of trade between the Atlantic and the Pacific.

Very respectfully submitted.

N. S. MANROSS.

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No. 6.

REPORT ON THE PROPOSED CHIRIQUE ROAD.

BY JAMES B. COOKE, CHIEF ENGINEER, ETC.

The route to which I have reference lies between  $7^{\circ}$  and  $9^{\circ}$  north latitude, and  $81^{\circ} 5'$  west longitude, on the east limited by the province of Veraguas, north by the Atlantic, south by the Pacific, and west by Costa Rica.

With regard to geographical position, there is none on the Isthmus of Panama that can compete with the province of Chiriqui, and for the construction of a road, its topographical facilities have by far a superiority, as I will afterwards show; for agricultural pursuits, its soil and climate are pre-eminently suited above all others in the tropical world; for there the farmer can choose just the climate he may require, from the most northern to the most southern, with all the intermediate temperature best suited to his pursuits.

There are, in my opinion, ample engineering facilities for the construction of the road: two-thirds of the road require little or no heavy work; the other third, passing over the Cordilleras, requires in several places cutting and embanking, in order to render it level; twenty-seven miles from the Pacific to Caldera the plains are gradually elevated, the grades not exceeding in any place the rate of one in sixty-three feet. At Caldera the passes are entered, and the road sweeps round the mountain spurs, or over their slight undulations, at grades varying in ascent or descent, at from one in thirty-five to one in fifty feet, for a distance of twenty-four miles; thence onward to the lagoon, at grades of from one in fifty feet to one in sixty-five feet. It must be borne in mind that these are all natural grades; excavating and embanking would reduce them to a regular line of ascending grade to the dividing pass of the Cordilleras, and from thence, in a descending grade, to the lagoon, neither of which grades would exceed twenty feet to the mile; but as these grades now exist, they are not very unfavorable to a railroad, but more favorable to a macadamized road than if reduced to one gradient line of ascent and descent.

The curves of the lines are favorable to either kind of roads, being of sufficient radius to permit nearly the whole speed of travel. The entire length of the line is sixty-two miles four chains and twenty-five links.

On the Pacific side, in the neighborhood of the Golfo Dulce, there is a magnificent harbor with deep waters, and well sheltered, requiring

but little engineering to render it applicable for the purpose of the road.

On the Atlantic terminal point of the road there is no place to be found upon the isthmus so well adapted for a harbor; it is well sheltered from the devastating northers and hurricanes of the tropics, and no harbor can be found excelling it in beauty, deep waters, of ready and well-defined entrance, and other natural advantages; not the least of which are streams of the finest and most delicious fresh water, poured down in never-failing supply from the mountain slopes. This same advantage also exists at the point selected on the Pacific; and, indeed, throughout the whole extent of the road, there is a succession of mountain streams, none, however, presenting serious obstacles to its construction, but affording to the road a supply rarely found in elevated countries.

Though rapid in their courses, these streams do not run out or exhaust themselves in the dry season. The reason of this is obvious; the peaks of the lofty mountains, rising some thousand of feet above the line of the road, penetrate the dense masses of vapors thrown up by the rapid evaporation of tropical climates, and form conductors around which is condensed the irrigated supply of the valley below. To this constant coursing of water may also be attributed the extraordinary healthfulness of this entire route across the isthmus; no other compares with it. The crossings of Tehuantepec, Guatemala, Nicaragua, Darien, and Panama, are, throughout nearly their whole extent, subject to fevers and maladies of the most fatal character; the decaying matter of their swamps and marshes impregnate the air with their destroying miasma, and the adventurous stranger who seeks the alluring gold-fields of California and Australia too often finds his grave upon the narrow strip which divides these great oceans. Not a marsh, or swamp, or putrefying place exists from ocean to ocean on the Isthmus of Chiriqui. The Chiriqui road will then, when finished, from these natural advantages, secure to itself the great travel, not only from the cities of the United States to California, but also from England to Australia and the East Indies. Nor does the province of Chiriqui offer less inducements to the immigrant to settle within its borders than will its road to the voyagers to distant lands.

Rich and fertile plains, from which spring, in the most luxuriant growth, the coffee tree, yielding in abundance, after three or four years' culture, a berry of extraordinary flavor. The tea plant, growing wild, requiring but the hand of industry to make it most productive; *cotton, rice of large grain, tobacco, flax, maize or Indian corn, the English or small-grained corn, wheat, Irish and sweet potatoes, peas, beans, cabbages*. Besides these there are various spices, including *ginger, pepper*, and a great variety of botanical and medical plants. The slopes of the mountain ranges afford pasturage of the best description, and thousands of cattle feed wild upon their sides.

In mineral wealth the country is exceedingly rich. In my explorations I found indications of gold in the greatest abundance existing in the river beds in dust and scales mingled with sand, which slight washing readily removed; gold bearing quartz in large quantities; and various places were discovered apparently very rich in the pre-

cious metals. Platina is found in large quantities, and I had also ample evidence of silver, mercury, antimony, molybdenum, barium, copper, tin, and iron ores. Coal is also to be found on both the Atlantic and Pacific. With regard to these coal formations, those on the Atlantic are very abundant and rich, covering a large area of ground.

On the Pacific side it outcrops in the island of Muerto; but I am of opinion, from examinations I made, that near David, along the line of route, abundance of coal, and of good quality, may be found.

After a careful analysis I found these coals to be composed as follows:

	Muertz coal.	Atlantic coal.
Volatile and bituminous parts.....	34.12	37.29
Solid carbon.....	59.38	56.53
Ashes.....	6.50	6.18
	<hr/>	<hr/>
	100	100
	<hr/>	<hr/>
Yields in coke.....	64.43	67.43

Red clay of great fineness, for the manufacture of bricks, exists in the most abundant quantities on both the Pacific and Atlantic sides. Fire clay is readily found; pipe clay, and various other substances, all useful and abundant.

The surface of the country is well covered with forest trees of every description suited for building purposes, among which may be noticed those woods of great durability: the *Nisperos*, *Zapadilla*, and gigantic oaks of close grain, strongly resembling the live-oak, cedars of large diameter and perfectly straight stems, of from sixty to eighty feet before a limb starts off from the main trunk; *mahogany*, *satin wood*, *ebony*, *sandal wood*, and a variety of others; also resinous *gum trees* of vast variety, *logwood*, *fustic*, and many others of great value; *tortoise shell*, *mother of pearl* of large size and great value. The shell which produces the ancient and greatly valued Tyrean purple dye is also found in abundance in the Pacific waters bordering the terminal point of the road.

That which has already been so briefly alluded to is sufficient to show that there is ample local advantage to secure prosperity to the road, without even that enormous trade and travel which must inevitably pass over it; for it is destined to be the central, the all-absorbing course which travellers and merchandise must pursue between the great markets of the globe. The natural position, formation, and productions of this region having, with its entire healthfulness of climate, stamped it as the point of transit between the two oceans, the only question left now is the kind of way or mode of transit which should be established.

From a careful examination of and deep reflection upon the entire subject, I have come to the conclusion that a macadamized road is the only one which ought, at the present time, to be made. The material for it through the mountain passes lies ready for use.

In this opinion I am sustained by the valuable report of Mr. McGeechy, crown surveyor of Jamaica, and Capt. Liot, of the Royal Steam Packet Company. After a careful survey of the Isthmus of



Panama in 1844, the gentlemen use these words in their report: "The most practicable and economical way of transit across the isthmus would be a good macadamized carriage road." The route across the Isthmus of Chiriqui was not at that time before the public. Had it been, and could the attention of these gentlemen have been directed to it, there is no doubt that a safe, economical, and healthy route would long since have been in perfection over this beautiful and delightful region of the tropical world.

With a cash capital of \$400,000 to \$500,000, and the whole expenses of constructing, such as for bridges, wharves, piers, stabling, toll-houses, drainage, &c., and all things incident to the construction of a macadamized road would be amply sufficient, and with a proper force, the road could be opened in eight months from the time of commencing, and in a period of twelve months the road could be put in complete working order.

In conclusion, from the examinations and explorations I have made upon the isthmus generally, I have found no spot to equal it, both as regards its climate, soil, and commercial position; and the lands contiguous to the line of route possess all the advantages for the settler, where but the hand of labor is alone wanted to till the soil which is so richly spread around.

I beg to submit myself, most respectfully, your obedient servant,  
JAMES B. COOKE, *Civil Engineer, &c.*

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No. 7.

REPORT OF CAPT. ALMY, U. S. N.

UNITED STATES STEAMER "FULTON,"

Norfolk, Va., September 25, 1858.

SIR: I hereby acknowledge the receipt of your communication, dated the 18th instant, desiring me to report to you upon the following inquiries in regard to Chiriqui lagoon, which I do accordingly, to the best of my knowledge and abilities, after spending nearly a month there in command of this steamer:

*Is the Chiriqui lagoon a proper harbor for vessels of the largest class?*

It is decidedly so, and an unlimited number can be anchored there at any and all times in perfect safety.

*How many entrances are there to it, and are they easy of access—deep and capable of protection by any land-works which could be readily thrown up?*

There are three entrances into Chiriqui lagoon from the sea: Boca del Toro, the centre; Boca del Drago, the western, and Tiger channel, the eastern. All are easy of access—deep, and capable of protection by land-works which could be thrown up.

Baco del Drago, or "Bogueo Mouth," as it is called by the inhabitants there, has the deepest channel and the easiest entrance for the heaviest class of vessels, such as line-of-battle ships. Much infor-

mation and assistance can be obtained in answer to the two preceding questions by reference to the admirable chart from the survey of Captain Edward Barnett, R. N., and published by the English admiralty, which charts are easily obtained. There are good pilots to be had at the settlements of "Isabel," situated on the southeastern point of Columbia islands, which village contains 100 houses, and about 1,000 inhabitants. But upon the different islands and shores of the lagoon it is estimated that there are about 1,700 inhabitants altogether.

*Are the islands (particularly Pope's island,) such as would form a good naval depot, and could arrangements readily be made to procure a supply of timber for repairs and construction?*

A naval depot could be formed at Pope's island, but whether it would be a good one I am not prepared to say. I should have to give it a further examination, and witness the effects of a gale of wind there. As a general thing, the water shallows out quite far all around this island, and the bottom is uneven with lumps. But the most secure and best sheltered harbors, feasible for wharves, docks, &c., in Chiriqui lagoon for a naval depot, is Shepherd's harbor, where there is a coal mine also as well as at Pope's island.

In regard to arrangements being readily made to procure a supply of timber for repairs and construction, I am unable to say. There is an immense quantity of timber, and variety of woods growing throughout the shores of the lagoon and vicinity; but whether it is fit material for large vessels, such as ships and steamers, I have had no means of ascertaining. I don't think that any of it has yet been tried, except upon a small scale. The settlers have built a few small craft—boats and canoes—which they state answer all their purposes, and stand wear and tear of service very well.

*Are there good supplies of fresh water, and readily obtainable?*

There are several streams and springs about the lagoon, and there was no difficulty in procuring plenty of fresh water at all times for the "Fulton." The watering facilities might be much improved, and doubtless would be if there was a greater demand for water to supply vessels.

*Are there abundant supplies of turtle, fish, and fruit, and at reasonable prices?*

When the Fulton was there—which was in November and December—there was an abundance of the finest large turtle, and also of the most luscious oranges that I ever ate, and at very moderate prices. There is also plenty of fish, requiring only implements, and persons skilled in it to catch them.

*Are there coal veins or deposits on Pope's island and on the main shore?*

There is a coal mine on Pope's island; one at a locality called "Secretary," on the main land; one in the vicinity of Shepherd's harbor; and one on the main land, west side of Alminante bay, which it was stated produced the best quality of coal of any of the mines. At the first two named places I obtained specimens of the coal, which were tried and experimented upon, both on board of this vessel and the United States steam frigate "Wabash."

*Is there within your knowledge any road or opening of a road across from the lagoon to the Pacific? and if so, do you consider it a good route?*

I have never travelled over nor seen this road; but while in Chiriqui lagoon I was informed that a horse-back road had been completed between there and the port of San Pedro, on the Pacific, which road could be easily widened into one for carriages; and also heard from various authentic sources that the route is a very healthy one, which I have every reason to believe is the case.

*Have you obtained any information as to the harbor on the Pacific side?*

I have no personal knowledge of it, never having been there.

*Could coal be transported over the opening between the lagoon and the Pacific, so as to give a supply for naval purposes at the Pacific harbor?*

It could not in the present condition of the road; nor could it be done unless a railroad was constructed entirely across.

*Has the engineer of the "Fulton," Mr. Newell, made any experiments with coal obtained from the vicinity of the lagoon, and if so, he will please answer the following questions?*

Mr. Newell did make a trial with a small quantity of coal obtained from the mines of "Pope's island" and "Secretary," and makes the accompanying explanations and answers to questions in the paper hereunto annexed.

I will take this occasion, which I do not deem out of place, to remark that the importance of Chiriqui lagoon in a national, naval, and maritime point of view generally, cannot be over estimated in the eyes of any nation aiming at ascendancy in the Central American States. It is situated just half way between Aspinwall and San Juan del Norte, (or Greytown,) and possesses comparatively a healthy climate. From my answers to the preceding questions, and from a glance at the chart, it will be seen that it possesses very many of the requisites for a great naval station, and any maritime nation even of limited power, once obtaining a foothold there, would make her influence decidedly felt in that quarter.

It is the opinion of all intelligent persons who have visited the coal mines upon the shores of Chiriqui lagoon, that if properly "tapped," shafts sunk and worked as coal mines are in the United States, that there will be found an abundance of coal of a superior quality, the value of which in that part of the world, under circumstances which may often arise, is beyond any calculation.

The lands of the province of Chiriqui are very fertile, and upon the high lands back half-way between the lagoon and the Pacific, are to be found the best cattle and beef in New Granada and Central America. The people are liberal in their feelings and ideas—more so than those of the other provinces around them—and invite settlers from the United States to come among them—will give them lands provided they come *quietly* as agriculturists and farmers to locate there, in which they extend all friendly encouragement.

I am, sir, very respectfully, your obedient servant,

JOHN J. ALMY, U. S. N.,

*Lieut. Commanding U. S. Steamer Fulton.*

HON. ISAAC TOUCEY, *Secretary of the Navy.*

UNITED STATES STEAMER FULTON,  
*Norfolk, September 24, 1858.*

SIR: In reply to the questions asked by the Hon. Secretary of the Navy relative to the coal in Chiriqui lagoon, I have to answer that the tests made of this coal on board of this ship were very limited, and not extensive enough to enable me to answer on the questions proposed.

Question 1st. Is it bituminous or semi-bituminous, or is it a lignite and not a pure coal?

Answer. I think it is semi-bituminous, and a pure coal.

Question 2d. How many pounds of water can be evaporated by one pound of this coal, estimating the best anthracite to evaporate 10 lbs. of water to 1 lb. of coal?

Answer. I made no experiments to determine its evaporative qualities.

Question 3d. Does it clinker on the grate bars, and is the quantity of ashes great or otherwise?

Answer. There being no auxiliary boiler on board, and the quantity of coal procured not being sufficient to try it in the large boiler, I am unable to answer this question.

Question 4th. How does its specific gravity compare with anthracite or Cumberland coal?

Answer. I made no test of its specific gravity.

Question 5th. Would it be subject to spontaneous combustion on account of sulphur or iron pyrites being incorporated with it?

Answer. I discovered no sulphur or iron pyrites in it, and do not think it would be subject to spontaneous combustion.

Question 6th. Would it break up into fine particles by twice handling?

Answer. I do not think that it would.

Respectfully, your obedient servant,

H. NEWELL,  
*First Assistant Engineer, United States Navy.*

Lieut. J. J. ALMY,

*Commanding U. S. S. Fulton, Norfolk Navy Yard.*

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[COPY.]

U. S. STEAM FRIGATE WABASH,  
*Aspinwall, December 30, 1857.*

SIR: In compliance with your directions, I have this day made an examination by practical test of the coal brought me by the steamer Fulton, from Balas del Toro.

There was only about five hundred pounds in all, yet sufficient to try in auxiliary boiler and the forges, and to form a fair idea of its quality.

This coal was taken from the surface, the mine not having been penetrated more than sixteen inches, and although its vitality has been nearly destroyed by the rains for many years, its combustion was tolerably good, producing steam as well as some of our own coal.

It is bituminous, and evidently from a superior variety, similar to the Indiana cannel. I have no doubt of the superiority of the mine.

Respectfully, your obedient servant,

J. W. KING,  
*Chief Engineer.*

Com. H. PAULDING,  
*Commanding Home Squadron.*

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No. 8.

*Notes of Captain Barnet's survey of Chiriqui, in 1839, in the British frigate "Thunder."*

The eastern part of Terbi and the west end of Columbus island from the Boca del Drago, the western channel into the Columbus lagoon, which, from shore to shore, is rather more than three-quarters of a mile broad, and a mile and a quarter long, in a north and south direction, and as there is no land immediately at the back of it, the opening is clearly distinguished on this line of bearing. From the east and west the Sail Rock and Swan Cay are sure guides.

The Sail Rock (so named from its close resemblance to a small vessel under canvas) is forty feet high, and lies two miles N. by E.  $\frac{1}{2}$  E. from the mouth of the channel, and a mile by three-quarters from the shore. Swan Cay bears from the Sail Rock SE. by E.  $\frac{1}{2}$  E. six cables' length. It is a narrow strip of rock, not more than 200 feet in length, which rises on all sides perpendicularly from the sea to an elevation of 185 feet, and its summit is crowned with brushwood and two or three cocoanut trees, and combined are the most remarkable objects on the coast.

There is a passage between the rock and Columbus island; it must therefore be always passed to the westward. It is bold, too, on that side, but it should at all times be given a very wide berth, owing to the current which, as before observed, sets strong in to the very mouth of the channel.

If, when between the rock and the entrance, the wind should fail, you must anchor immediately, and wait for a commanding breeze. The Boca del Drago has depth sufficient to admit ships of the largest class, but to strangers it is so tortuous and intricate as to be impassable to the smallest without the assistance of a pilot, who can generally be obtained from the village by making the usual signal. The following directions, however, may be given.

After rounding the Sail Rock, or when within  $1\frac{1}{2}$  or 2 miles from the shore, bring Lime Point, which is very low and sandy, and forms



the inner eastern point of the channel, to bear about S. by E. when, should the weather be clear and the high land on the southern side of the lagoon visible, you will observe on the top of lower ridge, which is a very remarkable flat table range of some extent, a single large square tree, like a tower, and, at the same time, nearly underneath it, you will perceive Pond Sark Point, which although only formed by strange, flat-topped, lofty trees, growing out from the water side, has the appearance of a bluff headland.

Bring either the one or the other in a line with the westernmost tree or Lime Point. The first (the square tree) in line will carry you as far as to the eastward of the Mandeville Rock, and the other in line will take you very nearly in mid-channel between it and the foul ground on the eastern side of the channel, which at the entrance is only  $3\frac{1}{2}$  cables wide. Bring the ship under easy but commanding sail, and stand in on either of these lines until the north point of Columbus island, which is a bold clay cliff, comes on with the northeast point of the channel, bearing in mind that the ship will then have to alter her course suddenly six points to the westward, and to be rapidly manœuvred; run with this mark on until within two cables' length of the reef on the western shore, then haul to the southward, keeping at the same distance off shore, until Swan Cay is open twice its own breadth of the NE. point of the channel, when you may haul to the eastward, and choose your anchorage at pleasure. It is H. W. T. C. here at xiii. 15 Rd. Ta. foot to 18 inches. The flood runs directly in one knot, but during the dry season the ebb stream is entirely checked by the current.

On Lime Point there is a small village consisting of about twenty English settlers, from whom a scanty supply of vegetables may be obtained, and wood is easily procured on the shore immediately opposite.

It need scarcely be observed that this passage can only be entered with the sea, and left with the land breezes. We may also here remark that, throughout the whole line of coast, from the river San Juan to Chagres, the beaches are formed of dark-colored sand, mixed with a large portion of finely commuted particles of mica and metallic grain. If, in the neighborhood of Chagres, a magnet be plunged into the lead, it will return covered with filings of iron, with the exception, however, of those on the north side of the lagoon islands; which are composed of pure white sand and shells. Seven and a half miles to the eastward of the Boca del Drago is the Boca del Toro, the northeastern entrance into the Columbus lagoon. When brought to bear in a S.S.W. direction, the opening is clearly pointed out and distinguished from the other Boca by the land on all sides being much higher.

The outer part of the channel is formed by the east end of Columbus island and the west end of Provision island; the latter remarkable for its greater elevation, and the bold, perpendicular, rocky bluff of Cape Toro, the Columbus shore being low. It is here  $2\frac{1}{4}$  miles wide, but from Cape Toro it narrows gradually until nearly abreast the centre of Careering Cay, when it is scarcely three cables' length in width; and as no distinct leading mark can be given, a pilot should

be obtained. It is capable of admitting vessels of the greatest draught, and those not drawing more than 17 feet might enter, in cases of necessity, by bringing the opening between Provision island and Careering Cay to bear S. by W.  $\frac{1}{4}$  W., when you will perceive on the lower and secondary group of hills at the bottom of the lagoon two not very remarkable hills in a line, which course will carry you in mid-channel until the village on the east end of Columbus island comes just open of the village point on the south end of Careering Cay; then steer SW.  $\frac{1}{2}$  W., and anchor with Careering Cay bearing north; the above course will carry you over the middle ground in from four to five fathoms. A rocky reef extends to the westward of Cape Toro half a mile; but it generally shows itself, as also that which runs off from the inner point or SW. end of Provision island. The water in the narrows is so muddy that the other shoals are but seldom seen. Therefore, after passing the SW. point of Provision island, border without fear a little towards Careering Cay, when they always show themselves.

NOTE.—There is a deeper channel one quarter of a mile wide to the eastward of the shoalest part of the middle ground on which there is only nineteen feet, but there is no leading mark for it; we can only give the following directions: Having run into the outer channel until the two village points are in a line, from thence steer S. SE. until the western end of Solarte Cay and Provision island are in one, then steer with this mark on for one quarter of a mile, when you may haul to to the westward and anchor as before directed; on the west end there is a very large cotton tree.

It is H. W. Ta. C. at xiii. 15; there is little or no stream of flow, and generally a constant outset, which, after heavy rains, runs a knot on the ebb. This is no doubt owing to the current being thrown off from Columbus island in an easterly direction, which, consequently, makes the outset the exit of the river streams, which run into the southern parts of the lagoon. It also makes this a more safe and easy entrance than the Boca del Drago; for, in going out, should the sea-breeze set in before you have cleared Cape Toro, you will find no difficulty in beating out. Take care, however, to give Long Bay Point a wide berth. A supply of vegetables, turtle, and poultry may be obtained here, and there is a well of excellent water just round the point of Solarte bay.

The Columbus lagoon is about thirteen miles in extent from east to west, and seven to thirteen in a north and south direction. It is bounded on the north by Columbus island, which is seven miles long from NW. to SE., and three and a half broad, and part of Provision island. Its eastern and western sides are low and swampy. Its southern shore is bounded by the lower ridge of the great mountain chain, whose base rests on the verge of the sea, rising precipitously to an elevation of 700 feet, and at the distance of only two miles from the southwestern side, a remarkable flat table range, extending in a NW. and SE. direction fifteen miles, rises to a height of 1,700 feet, from which descend into that corner of the lake five small creeks, or, indeed, rivulets, which are ascended but for a short distance by small canoes.

Besides the two entrances of the north, there is also a hidden, nar-

row, intricate passage, at its east end leading to the sea, through which, however, with the assistance of a pilot, the Thunder on one favorable occasion succeeded in passing without accident. And, also, another similar one at the southeast corner, which enables a small drogher or barge canoe to communicate with the Chiriqui lagoon. We can give no safe directions for navigating either of these channels; it may, however, be stated that the water in them is tranquil—that the coral shoals are easily seen and avoided. Having, therefore, entered them, the navigator must depend entirely on the eye, and by such means alone they have favored the escape of smugglers and privateers. There is also one of this nature between the east end of Solarte Cay and Provision island. *Every part of the lagoon affords secure anchorage, and contains harbors within harbors, which will admit of ships of the heaviest burden, where in many parts they might lie concealed by the side of the shore.* The largest and most advantageously situated of these is at the SW. side of the lake, formed by the mainland on the south, and Shepherd's or Eurana Cay on the north; at each end of which is a bold and clear entrance  $\frac{4}{10}$  of a mile wide, and leading into a deep and perfectly secure basin  $\frac{1}{4}$  mile in breadth and  $2\frac{1}{2}$  in length, with a general depth of 12 fathoms off both parts of the main forming the channels. Foul ground runs directly from them towards the cay, nearly two cables' length.

Shepherd's Cay has been so called from its being in possession of an English settler of that name, who has cultivated a great portion of the island, and on its southern side established a small ship yard, where he has constructed several small trading vessels with the excellent native timber which abounds on the opposite shore and on Popa island, in the Chiriqui lagoon. The most applicable for the purpose he has found to be the eboe tree, which grows in great abundance all around the lagoon, from 3 to 4 feet in diameter, the trunks from 50 to 60 feet, straight or generally so, with large spreading branches, and crooks of all forms and dimensions. The sarsaparilla grows to the same height, and from 2 to 3 feet in diameter; but, being rather brittle, requires caution in felling. The iron-wood, Spanish elm or caparo, is of equal dimensions, saws and works well, and is peculiarly valuable in planking, as it stands the effect of the climate better than other woods generally employed for this purpose. Cedar grows to great perfection. Besides himself, there are about twenty colored laborers whom he employs, who have likewise partially cultivated the banks of the rivulets opposite the islands, the soil of which produces the usual tropical fruits and vegetables in the greatest abundance and luxuriance. Sugar cane, cotton and the coffee plant are here seen growing in perfection on the borders of the lake, of the finest species, and are reared by the easiest labor.

As already noticed, there are four small navigable creeks, which empty themselves into the southern side of the harbor, from which excellent water is procured but a very short distance from their mouths. Iguana creek, being the deepest, is the best for this purpose. With two large canoes, the ship being moored within two cables' length of the entrance, we obtained 25 tons a day. In approaching this harbor from the northern part of the lagoon, care should be taken to avoid

the shoal, which extends easterly from Pond Shark Point. Coco Cay should be kept close aboard until the above point bears NW. by W., when you may shape your course for either channel; there is no danger whatever. There is excellent anchorage in the little Toro lagoon; but the channels, although sufficiently deep, are very narrow and intricate.

It does not appear that these lagoons, or indeed that any other part of the coast from Salt Creek to near Chagres, was at any period regularly settled by the old Spaniards; but it has for a very long period been visited by English trading vessels, employed by Jamaica merchants in a small commerce with a few scattered Indians on the shore, and on the borders of several of the large creeks and rivers.

From the Boca del Toro, the northern side of Provision island from the coast line, which extends E.S.E.  $8\frac{1}{2}$  miles, its general elevation is irregular, and varies in height from 300 to 400 feet. From the NE. point a reef extends  $\frac{3}{4}$  of a mile, which always shows itself, and within a mile and a half from the shore you again encounter the easterly stream.

SE.  $\frac{1}{2}$  E. two miles from Old Point, the east end of Provision island, lies the two Saportilla Cays, which are low, each about 6-10 of a mile long, 2-10 broad, clothed with excellent fire-wood—the tops of the trees being 80 feet above the sea. Between Old point and the westernmost cay, there is an intricate channel for coasters, quarter mile wide.

The Saportillas are skirted by a reef in all directions. It extends but a short distance from their north and south sides, but from the SE. cay it extends in an easterly direction, nearly a mile and a quarter, and should be carefully avoided, as it does not always show itself. There is good anchorage on the SW. side of the cays, about a mile from the shore.

From the SE. Saportilla, the westernmost of the Tiger Rocks bears E. by S. half S. six miles.

The Tiger Cays consist of three small rocky islets, lying in a straight line nearly east and west, one mile distant between the extreme points, the easternmost of which is the largest, and is covered with scanty low brushwood, but on the others are trees, the tops of which are about 35 feet above the sea. They are closely fringed by a reef, which at all periods prevents landing. 6-10 of a mile N.N.W. of the westernmost cay is a very small detached rock, only six feet above the sea; and 4-10 of a mile in the same direction from it is a very dangerous breaker.

This breaker forms the eastern, and the reef of the SE. Saportilla forms the western boundary of the outer entrance into the Chiriqui lagoon and Bluefield.

The Tiger Cays are easily distinguished from their proximity to the high rocky promontory of Valiente, which lies SE. of them half a mile, and which is the most remarkable headland on the coast, its altitude being nearly double that of any other point between Buppan's Peak and Salt Creek. Its northern face runs east and west two and a half miles, from which irregular hills rise almost precipitously from the shore, gradually in height from the NE. to the SW. side,

where a prominent rounded peak rises 722 feet above the sea, every part being thickly wooded to the summit.

Between the Tiger Cays and the point of the reef which runs off from the NE. side of the cape in a NW. direction 9-10 of a mile, there is a deep channel, having, however, a rock very nearly in the centre, which, although with twenty-one feet water over it, almost constantly breaks, even in a calm from the heavy swell (NE.) which at all times sets in over this coast. From this circumstance, and that of the current setting strong in that direction towards the cay, its navigation should not be attempted without certainty of a commanding breeze, and then be sure to pass between the Tiger Cays, which are bold too, and the breakers the mark to clear which is Baboon Cay, a very high sugar-loaf rock close to the west side of Bluefield Point, but open off Cape Valiente. From the western side of the promontory a bank extends in that direction one mile and a quarter, studded with shallow rocky heads, the northern side of which is bounded by a small range of islets, precisely similar in appearance to the Tiger Cays, and, indeed, it may be observed that they are also of the same formation, being rocks of indurated clay, of so friable a nature that the sea in some parts has forced its way through, and formed arches crowned with cocoa-nut trees, which are very remarkable. It is said that by this means one of the Tiger Cays has lately fallen down and disappeared altogether.

The Chiriqui lagoon is thirty miles long in an E.SE. direction, the greatest breadth being about ten miles between the Water Cay and the Warra Bruna rivers.

Its outer entrance is from between the Tiger and Sapotilla, already mentioned, and from thence to the southward; its inner entrance is between Bluefield Point and Water Cay, where it becomes very intricate. Having entered the Tiger channel, the inner opening shows itself so distinctly as to require little or no description. Standing in with the sea-breeze, which should always be the case, round the east end of Water Cay, at about three-fourths of a mile distant, taking care not to come within ten fathoms, until the west end of the Sapotilla (western) is just open off the east end of Water Cay, which is the leading mark for the eastern channel into the lagoon, and when the hut close to the beach in Green Bay comes on line with Valiente Peak you are within the shoals.

Having the above leading mark on you will also see just open off Water Cay a very small rock, three or four feet above the sea level, and which, in thick weather, when the Sapotilla is not seen, will serve its purpose as a guide in, but it is so close to the shore that it should be used very carefully. In this channel the ebb runs out to the northwest from one to two knots, but the flood is entirely checked by the river stream. It is high water at Tiger Cays about noon, but the rise and fall seldom exceed a foot.

The lagoon water is generally so thick that the shoals cannot be seen.

There is also a good channel to the westward,  $\frac{9}{10}$  of a mile wide, and much shorter than the above, but for which there is no leading mark. We may, however, give the following directions for it, and a



general warning that in both channels the lead is of little assistance, the water being of such great depth and the banks so steep. Passing Water Cay a mile distant, steer south until Valiente Peak comes in a line with the centre or highest part of Toro Cay, (the westernmost of the cays off the Bluefield promontory;) steer by this mark until the leading mark for the eastern channel comes on, then steer S. by W., and when Valiente Peak is in one with the northern extreme of Bluefield promontory, you are inside the western shoal. To go out of this channel bring the east end of Water Cay to bear N.  $\frac{1}{2}$  W., steer on that line until the above inner leading mark comes on, then haul up N. by E., which course will carry you clear out to sea. The NW. side of the lagoon is formed by Water Cay, Popa, or Iron-wood island, Deer island, and a narrow neck of the main land, which separates it from Columbus lagoon. There are good channels for boats of heavy burden between the cays, and between Water and Popa island small vessels may enter if they have good local knowledge. The channels on either side of Deer island communicate with the other lake. Popa island on the SE. part is clothed with excellent ship-timber, called ironwood, or Spanish elm. Every part of the island is densely wooded.

This side of the lagoon is studded with small detached coral-heads, nearly even with the sea level, to a distance of from two to three miles from the shore, and should therefore be approached very cautiously.

The western side is fringed with a coral ledge which extends off-shore from  $\frac{1}{4}$  to  $\frac{3}{4}$  of a mile; bold, too. Many small rivulets pour themselves through that part of the shore, and the Robala river at the SW. corner, although very narrow, admits the sarsaparilla pickers in their little canoes two or three days' journey. At the end of one day's voyage rapids are to be met with, and after two days' ascent it receives a small stream from the southward, which throws so large a body of water in heavy rains as to render it almost impassable. The borders are said to be fringed with trees of large dimensions.

From the Robala river the shore commences to turn gradually to the eastward, forming the southern boundary of the lagoon. It is low, and some parts swampy, but the marshy land cannot extend far back, for the base of the lower range of mountains sets within a very short distance from the sea, and they are almost precipitously to an elevation of 2,800 feet. Five miles SE. from the Robaldo river is the entrance of Frenchman's creek, which is a small, navigable, fresh water stream emanating from the high lands immediately at the back. For some distance on either side of its mouth the land, although thickly wooded, appears free from swamp. An English resident and his family have established a settlement on the western side of the stream, and cleared a small portion of the land, which is extremely rich and fertile. He also finds the end of the lake frequently abounding in turtle. Since the completion of the survey a path has been opened from this creek across the mountains to the town of David, which lies at the base of the range on the opposite side before alluded to, by means of which cattle have been conveyed from there and carried to the settlement at the Boca del Toro in three days.

This position is clearly the most favorable in the lagoon for the establishment of a settlement, not only from its nearer proximity to

the residents of Chiriqui, but also as it affords a considerable space of ground free from morass; the shore is clear and bold, the anchorage is good, and there is a constant supply of water.

From the creek the mountain range turns almost abruptly to the southward, forming the western boundary of a deep valley, varying from thence to apparently many miles in breadth, through which descends several small streams. The largest of these, the Chiriqui river, is situated five miles east of Frenchman's creek, but is so small, and its rapids are so formidable in the rains, as to render it quite unnavigable even for canoes. During the dry season its existence is scarcely discernible. Indeed, in the absence of a guide, we had some difficulty in finding it.

Frome hence the shore receding to the SE. forms a bay five miles in depth, which terminates at the entrance to the Warree Biaca river, eight miles east of the Chiriqui. From the Chiriqui the low swampy ground of the delta extends into the bay three miles, where it is checked by the foot of the lower range of mountains, which again rests on the shore, the summits rising abruptly to a height 2,600 feet.

In the SW. corner of the bay, on the side of a small rivulet, there is an English trading post, where is bartered the sarsaparilla, culled by a few resident Indians in its employ.

From the Chiriqui river to the settlement the shore is closely fringed with coral—steep, too; but from thence to the Man creek, shoal water extends out from the bottom of the bay nearly two miles.

After the prevalence of heavy rains small canoes are enabled to ascend the Man creek nearly two days' journey. The entrance to the Warree Tiarra (water belly) forming a point of land, is easily distinguished, and, although not more than 20 feet wide, has a foot of water on its bar, even in the dry season, and will admit boats as far as the rapids, which are about eight miles up. Here there is a small Indian settlement of ten families, and from which a path leads to the village at the head of the Cheara Molo.

From the Warree Tiarra the coast again forms a deep shallow bight to the southward, and from thence to the east end of the lagoon the shore is very low and swampy.

The Chiara Mula is the largest, and indeed the only considerable river in the lagoon. On entering the Sigor channel by keeping the leading mark on, you will be led to its entrance, off which you may anchor in nine or ten fathoms, about one and a half miles from shore.

A low mangrove island at the mouth divides the stream into two channels; the eastern one is alone navigable, and on the bar, during the dry season, you may find a foot and a half water, and at this period in the river the water continues baulkish for a distance of two miles. Watering here is therefore attended with much labor and sickly exposure, for the banks are low and drowned on either side, until you have ascended nearly three miles; from thence they gradually rise, and at the first rapid they are seven feet above the river. To this point, which is about 12 miles from the mouth, the river varies in breadth from 100 feet to nearly as many furlongs, and in depth from 2 to 12 feet.

About a mile below the rapids there is a small clear spot, and temporary hut on the left bank, and also another, a mile below it, on the right bank, which afford shelter from the heavy rains which incessantly pour down. At the commencement of the rapids an arm of the river turns off to the SE. and forms the Torey creek, probably the St. Diego of the Spanish, which disembogues three and a half miles to the eastward of the Cheara Mola.

From the rapids the ascent of the river can only be accomplished in small, strong canoes. An attempt was made by us in a four-oared carver-built gig, but after three hours' perilous labor, in which we had only advanced one mile, by the advice of our guide we were compelled to abandon the attempt.

About 10 miles above the landing of the rapids, on the right bank of the river, is the most considerable village of the Nabeate Indians, consisting of 30 or 40 families, and where an English trading post has been established with success for very long period.

It may, however, be stated that a few years ago the settlement was very nearly abandoned, in consequence of a gross act of debauchery committed by a resident on the wife of an Indian, which cost him his life, and created feelings of fearful revenge among the tribe. A strong attempt was made by the surrounding traders to capture the culprit, but he has been successfully concealed from pursuit.

At the settlement English cotton and hardware manufactures are bartered for sarsaparilla, vanilla, cloth, and cattle and hides. The situation is said to be healthy, and communicates by paths with the Worree, Piarra, and Isabel creeks.

All the tropical esculents grow around in great abundance. There appears to have been at a recent period a large cultivated tract on the right bank, a little below the first shallows, and where still remain growing plantains and bananas in natural profusion.

In the SE. corner of the lagoon, 4 miles from Torey creek, there is another small stream, called by the fishermen Catabella creek, probably the river Ysabel of the Spaniards. It will admit a small canoe for a little distance, and a short period ago, at about an hour's pull from the landing, there was a trading post, from which a path led to the Chrica Mola village. Two miles to the eastward of the entrance of Chrica Mola there is a small, deep cove, in which the trading coasters await the return cargoes from the settlements, and are almost hid under the cover of the trees.

The whole of the eastern shore of the lagoon is low and swampy, and there is no landing.

In the NE. corner the soundings run deep into narrow mangrove islets, which have afforded concealment to small smuggling vessels.

The NE. shore is so bounded by detached rocky shoals as to render it unapproachable with safety to large vessels; it is resorted to, however, by fishermen during the turtling season. From where the mangroves terminate the shore rises in red clay cliffs, separated occasionally by sandy beaches and mangrove points, until it reaches the eastern entrance point of the lagoon, where it rises into a low headland. Several cultivated spots and huts are seen on this shore of the lagoon, and on the west end of Patterson's Cay. The soil is extremely fertile,

and not thickly wooded, which renders its clearance of light labor. Fresh rivulets, which run from the ridge of hills immediately at the back, flow through or near all these localities.

Close to the extremity of the Bluefield headland, at the end of the Green Bay beach, there is a constant stream from which boats may receive water conveniently, but the anchorage in its neighborhood is exposed and dangerous.

From Bluefield point the shore extends nearly a mile in N.NE. direction. About a cable's length from western point there is a small bluff rock, about 3 or 4 feet above the level of the sea. Three-tenths of a mile from the SW. end of the bluff the shore is low and swampy, skirted by a sandy beach, and from thence it becomes a very narrow neck of land, which terminates in a high, bold, rocky bluff, thickly wooded. From the northern end of the beach a high, bold, rocky ledge sweeps for a short distance, at the extremity of which is a remarkable high sugar-loaf cay, about 150 furlongs from the shore alluded to in the mark for the Valiente breaker. Half a mile to the westward of this there is a cluster of small rocky islets called the Toro Cays; they are, however, so close together that they generally appear as one island; but in some positions the southern small islets are seen to rise up perpendicularly from the surface, crowned with trees. They are formed of dark, indurated clay, in which is imbedded curious thin spiral layers of pebbles and stones. The space between them and the shore is all foul ground, and extends to a quarter of a mile from the cays. The extremity of the above neck of land may be said to be the southern point of the entrance into Bluefield inlet. The neck itself forms the western side of a shallow bay, half a mile in depth, and a mile wide, which is terminated to the westward by Creek point, a bold, precipitous headland, the tops of the trees on which are 180 feet above the level of the sea. You have 8 fathoms within a cable's length of the point, but westward and eastward of it a shallow, rocky ledge extends to a distance of nearly half a mile. From hence this shore again recedes abruptly to the SE., forming another shallow bay, nearly of the same depth, and a mile and a quarter wide; it is terminated also by a similar rocky promontory of equal height, but which extends to the eastward for half a mile. This shore, with the southern side of the Valiente promontory, forms the south Bluefield inlet, which is 4 miles long, and four-tenths of a mile wide in its narrowest part, and is accessible to ships of the largest class with perfect safety.

Having passed to the westward of the Tiger breaker, with a view to enter this inlet, haul up and steer direct for the western Ton Cay, off Bluefield point, until the southernmost high hill at the entrance of the inlet is just open of the inner high headland, on the south shore bearing E.  $\frac{3}{4}$  S., when you may steer boldly up, clear of the rocky bank, which extends off the Valiente promontory, and forms the north side of the channel. This is the only leading line we can give, but it is by no means easily distinguished; no danger, however, can arise by keeping the southern bold point on board with about two cables' length, taking care, however, not to enter the bights between them. On opening the inlet you will perceive a very remarkable small, black

rock, thirty-two feet in height, crowned with trees, standing apparently in the centre of the harbor; it lies on the edge of the north side of the channel, and should you have to make a tack to the northward before you are inside of it, do not bring it to bear to the eastward of E. by N., the direction from it off the Valiente bank. The best anchorage for large vessels is with this rock bearing W. by N. and Cape Valiente on, with a remarkable bluff head a little to the southward of it, at the extremity of which there is a large hut, bearing N.N.W., which will place you midway between the shores; a position much higher up may be chosen, but you will lose the full benefit of the breezes.

Nothing can be more beautifully picturesque than this little inlet. You lie, as it were, in a deep valley, three-fourths of a mile wide, the sides of which, to the north, gradually ascend to the bold, rounded peak of Valiente, 722 feet in height, and on the south to a height of 444 feet. On both sides, and indeed all around the Valiente peninsula, are scattered detached huts of the Valients, and cultivated spots, peeping out from the gorgeous and dense woods which clothe the hills on either side. The eastern shore is skirted by mangroves, and is swampy. At the NE. corner there is a rough path, which leads across the isthmus to the opposite seashore, which is not quite one-half mile across. Although the Indian habitations are wildly scattered about, this is the principal, indeed the only, settlement which they may be said to have on the coast between Fall creek and Chagres. About half way up the inlet, round the inner bold promontory, on the southern shore before described, there is a large American trading post, with a single resident and his family, who is employed in barter with the surrounding natives. A clear and constant spring of excellent water runs through the beach by its side, from which vessels may readily obtain a supply by conducting a hose to their boats, anchored off the shore, which, from hence, is shallow for some distance out all around the SE. mangrove corner of the creek.

Both sides of the shore are more or less deeply indented, here and there forming sandy bays, in which the seine may be hauled with great success; taking care, however, that they are not destroyed by small alligators, and that your people are not electrified by the torpedo.

Wood may be obtained; but when time is not an object, it would be better to obtain the article from either of the Sapotilla Cays, where the crew would be less exposed to the baneful effects of malaria.

The Valiente Indian is, in general stature, much below that of the European, and far inferior in muscular development. Their limbs, however, are well proportioned, and their hands and feet remarkably small. Their complexion is copper-colored, hair black, straight, long, and glossy, their looks vacant and indicative of extreme apathy. Both sexes paint their faces red and black most grotesquely; indeed, in this art they expend much time and pains. The black color is procured from a gum, which, being placed in a hole in clayey earth, is set on fire, and burns like a candle; an axe is held over the flame, and a collection is deposited upon it from the smoke, which, mixed with a yellow gum, forms the dye, which will adhere to the skin for



three or four days, when it falls off in scales. The red is obtained from a nut of the Palen tribe.

The traders speak of them as a pacific, well-disposed tribe; and for their honesty, we may state that we frequently entered a hut and found many articles left carelessly exposed, the whole family being absent on a fishing excursion at some distance. The house at Green Bay was, at one period, a trader's, where large quantities of goods were frequently left deposited without any other protection than lock and key.

All the adults are more or less clothed; the males in European linen trousers, with a shirt thrown loosely over; the females are generally bare to their waist, with a large cotton wrapper round the lower extremities. Polygamy is said to be common, but an act of adultery generally costs the life of the seducer.

Nothing can be more rude or simple than the construction of their huts, which is little more than a low thatched roof placed on piles, with cross-beams which support at one or both ends a rude sleeping platform, sometimes in exposed situations; or when there are sick inmates, you will see part often fenced in to protect them from the incessant rains and prevailing winds, but the rest of the lower part is entirely exposed to the height of 5 feet.

Their wants being few, the furniture of the hut is consequently scanty; a fowling-piece, machete, bill-hook, spears, fishing-gear, grain, hammocks, and bags, two or three cooking kettles, and a few calabashes are all they require. The hammocks, bags, and lines are made by the females, from indigenous grain, which is almost as strong as hemp, and which they dye rather tastily in variegated colors.

The black dye for this purpose is procured from the leaf of a plant, the juice of which is expressed by beating, and then mixed with a small portion of a very black species of clay and a little water, in which (boiled) the grain is immersed. The yellow dye is procured from a wild ginger, probably a species of *burmera*, which is merely rubbed on the fibres, and, when dry, produces a butternut tinge, but the colors are not lasting; the latter root is said to be poisonous if applied to the mouth or wounds.

Nature is here so bountiful that agricultural labor is scarcely needed, nothing more than cleaning the ground and planting being required; and their mode of living is so simple that even this is scarcely required, except for the cultivation of cassava, their substitute for corn, and a small quantity of sugar-cane; pine-apples, pawpaws, both of very large species, and the latter an excellent vegetable, grow almost wild around the inlet; and the banks of several of the creeks afford an abundant supply of plaintains, bananas, and other wild esculent vegetables. The men are generally employed in hunting and fishing; the women, in procuring from the woods sarsaparilla for the traders, the collecting of which, although not laborious, is a fearful occupation, from the venomous reptiles which infest the dense and almost impenetrable underwoods. A season would seldom pass without the loss of a life from the attack of a snake, whose bite is surely fatal.

The hunter has also to encounter a formidable enemy in the warri; should his aim be missed, his only hope of escape is in climbing the

nearest tree, at the foot of which the animal will remain watching until finally dispatched or desperately wounded. They are very good eating, but the natives are careful to extract from the loins a gland, which, if left, taints the flesh. The forests are almost in possession of a large species of monkey, (the *Myceta percinus*,) who during the day are seen in large droves, with their young on their backs, springing in the most surprising manner from tree to tree by means of their prehensile tail, and in the night rousing every one from sleep by their frightful yet mournful howls. The other inhabitants of the shore observed by our sportsmen were the peccari and ajonte; among the feathered, a remarkable bird, probably the cassicus of Swainson, in many respects resembling the rook in their habits and appearance, of a black purplish plumage, with a few bright yellow tail feathers, whence they are called yellow tails; red beak, white wattles, black legs, and sharp, encurved talons; they build on the extremity of branches of the loftiest trees, long gray nests suspended by a single pedicle, and in such numbers as may be presumed consists with their mutual safety. Mackaws, parrots, cassoways, fringed plovers, bitterns, rails, goldings, kingfishes, and a noble swan (*penelope cristata*) were seen and shot on the borders of the Lagoon creeks. The natives make use of a fruit which is found on the banks of the creeks, called by them sapa, and by Spaniards patralis. It is a species of the prickly palm, and grows in clustered bushes, about the size of a pear, but shaped like a cocoa-nut. Its taste resembles that of a chestnut when eaten in a raw state, but leaves a burning sensation on the tongue and fauces; when boiled it is a wholesome esculent. They also employ the guache root as an antidote for most snake bites. The religious impressions of the Valients, although few in number and simple, are still imbued with fear and superstition. They appear to believe in the existence of a God and an evil being; the former, however, is but little revered; the latter is deeply dreaded; that they have a feeble glimpse of a life hereafter may be gathered from their extreme sorrow at the departure of their friends, and in the belief of the existence of their spirits afterwards. On the occasion of death, the body is kept suspended in its hammock in the hut until the whole of the relations are collected, which seldom occurs until decomposition has taken place to a shocking extent, when it is quietly lowered into a shallow grave immediately underneath where it is hanging, the hut becoming the common mausoleum, which is never abandoned under such circumstances. It is remarked that the race is decreasing greatly, and, probably with some truth, it is attributed to the mortality owing to this sad custom. Their grief exists for a long period, and they are frequently found in retired spots near the hut weeping and conversing, as they believe, with the spirits of the departed. Although we did not see idols, we observed figures painted on the posts of their huts as a charm against the evil one. It is high water T. C. in the inlet at half-past twelve, but the rise and fall is only a foot. There is no perceptible stream on the flood, but the ebb, although weak, will assist in beating out. From Point Chiriqui, which is the northeastern extremity of the Valiente promontory, a reef nearly dry, in which there are several small rocks and cays, from 8 to 150

feet in height, extending in a W. NW. direction, nearly a mile and a half wide; the swell in it, however, is so great that it should never be navigated except in case of absolute necessity. From the above point the coast line of the peninsula is a white sandy beach, backed by highlands extending in a southeast direction five miles, where it terminates in a high, bold headland, termed Tobopoo bluff. The whole line of this shore is skirted by a reef on which the sea continually breaks, and which it is extremely dangerous to approach.

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No. 9.

*Report of Captain Colombel on Golfo Dulce, received 25th of September, 1851, to serve for the colonization and explanation of the maps of this part of the Pacific coast.*

During a sojourn of six months in this place, surveying every bay, and visiting every creek, we are enabled to make many authentic notes which we will now compile. Amongst our performances we shall note particularly the road we have traced from Terraba to the Gulf, this unknown part of the projected route, uniting the Pacific and Atlantic by the footpath of the Indians, which conducts from Terraba to Boca del Toro, particularly attracting us. A month before our departure from this flourishing colony (in which we took great interest) for San José, we were successfully aided by the attainments of our friend and colleague, Captain S. Lallier, in completing our labors by making an exact plan of the Gulf, and in taking new notes.

Our observations will be impartial; we have done our best especially to avoid that so common exaggeration when one speaks of a new place; we will then, with sincerity, give all our observations.

Our six months' sojourn, the united labors of our colleague and self, the kind attention of Captain Mitchell, commanding the whaleship "Jeune Adonis," of Callao, who placed his vessel and boats at our disposition during the survey of the Gulf, are not-to-be-doubted evidence that our notes are veracious.

Our recital will be long; it is a general review of the particular notes which accompany the map, and we will divide it into six parts. The first will comprise the general aspect of the Gulf, its configuration, its dangers, the winds blowing there, and its different currents. The other parts will comprise each a portion of the Gulf; we will point out the nature of the soil, its productions, and the rivers and lakes comprised in these sections.

Our object in giving this review is to enlighten the company and the government of Costa Rica upon a rich part of its territory completely unknown. We shall consider our trouble well rewarded if, seconding their laudable efforts, our observations may be useful to European emigrants; if we shall succeed in paving the way for a more extensive exploration, and in attracting to this rich and beautiful country those unhappy populations of Europe who would there find an assured existence.

## PART I.

The entrance of the Gulf, five leagues wide, is free from dangers. The two points which form it are high, steep, and leave not the least doubt to the navigator. At a third of a mile in the E. SW. of the point of Matapalo is a flat rock, raised about three metres and a half; it may be considered rather as a marked point than one of danger, its approach being very safe.

The aspect of the Gulf, which from its entrance almost to the Tigrito runs from N.  $\frac{1}{4}$  NE., is magnificent—nothing more picturesque than the plains covered with tufted trees, and in the background the layers of mountains piled one above the other, marking their distances by their divers hues, can possibly be imagined.

The high mountains of Salsepuede advancing towards the NW. encircle a low plain covered almost to the shore with trees. The right hand side, although high at the entrance, is lower near the Rio Corto, and renders visible the rich flowery plains approaching the Golfito; there, as upon the coast of the Pacific, from Salsepuede to Matapala, may be seen a border of cocoa-nut trees, one of the richest productions of the country.

At the opening of the mountains in the NE. rich valleys exist, which, on being cleared, would furnish most advantageous sites for farms.

At Punta Arenitas the Gulf narrows, and is turned sharply towards the NW.; and on approaching this point, one is astonished at the spectacle which presents itself, perceiving, so to speak, a new Gulf, whose circumference is seven leagues; the same woody plains we have noticed from Matapalo to Punta Arenitas are observed in the west of this second part of Golfo Dulce. The bottom and the NE., almost to the Golfito, are crowned with high mountains, covered with gigantic trees, and dying away at the sea-coast. In the distance may be perceived the high chain of the Andes, running from the west to the east.

The new direction which the Gulf takes at Punta Arenitas prevents heavy winds from raising the sea in this second part; this circumstance, joined with the excellent anchorage, makes Golfo Dulce a port which may vie with the best in the world. Its geographical position and its configuration promises it a brilliant future, and there is no doubt that, the road finished, Golfo Dulce will become the first port on the Pacific Ocean.

## DANGERS.

From the rock of which we have spoken, above to the point of Tigrito (left side of the Gulf,) the navigator has nothing to fear, but we would counsel him to choose in preference the larboard, especially during the ebb tide; there is always good anchorage with 6 to 8 fathoms. The passage between the rock of Matapalo and the land can only be convenient to small boats having a stern wind or aided by the tide.

East of the point of Tigrito is a bank, which, at the furthest, extends



only about a mile, and at its extremity are two rocks, distant half a cable's length from each other, and two metres high at low water. The passage between these rocks and the land ought not to be attempted even by vessels of a slight draught of water. The bay at the point of the Tigrito makes with the south point of Punta Arenitas has little depth; the sea raised by the "virazon" breaks throughout its whole extent on low bottoms.

From Matapalo to Punta Arenitas, keeping always a mile and a half or two miles from the points without attempting to follow the windings of the shore, a regular channel of six, seven, and eight French fathoms will be found; at the wide parts the depth augments by three, four, and five fathoms.

East of the point of Punta Arenitas, at the distance of about a third of a mile, there is a bank which has, at low water, scarcely a fathom; its greatest length from west to east is about a mile, its width a quarter of a mile.

The anchorage of Punta Arenitas is N. NE. of the point, distant half a mile, depth 17 fathoms at N.  $\frac{1}{4}$  NW. at a half cable's length from land. There is anchorage at 11 fathoms, but this is only convenient for small vessels.

Between the bank of which we have spoken and the point, there is a passage for ships of a large draught of water, but we would not counsel others than those practiced in the coast to attempt it.

The bottom of the small bay of Punta Arenitas is dry at low water; the ebbing at this place is three hours and ten minutes. The tide rises generally from 10 to 11 feet, in high tides even to 15 feet; these take place two and three days after the syzygies. As far as the Tigris it would be dangerous to approach the shore at any distance nearer than a mile; the bottom, at this distance almost equal, varies sensibly in nearing the shore. The point of the passage at Tigris advances nearly a mile into the sea, and is left dry at low water. From the Tigris almost to the bottom of the Gulf (the Rincon,) there does not exist any danger, taking care to keep always at the distance of a mile from the points.

In the NE. part, the bottom deepening allows a nearer approach to the shore. We advise sailors to give a wide berth to the "Islotes;" these little islands are bound together by a chain of rocks and coral which require the skill of a pilot. At the mouth of the passage of "Las Esquinas," for a distance of two miles, there exists a bank on which there is little water. The channel, which is deep enough elsewhere, is near the point of the same name; this channel will only admit small vessels, as the depth diminishes sensibly on approaching the passage.

From the point of "Las Esquinas" to the Golfito the depth is considerable, even near the coast, and there is no obstruction excepting one small bank on the larboard entrance to the Golfito; but the proximity of this to the shore, less than half a cable's length, renders it completely inoffensive. The channel of the Golfito is at mid-distance between the two points, and has a depth of from six to nine fathoms. From the Golfito to the Rio Coto it is not advisable to approach the shore nearer than from a mile to a mile and a half, on account of the



great unevenness of the bottom. W.S.W. of the river Coto there exists a bank of rocks on which there are always breakers, and which stretch out for three miles from its mouth. The channel is in the south part. The depth on the larboard coast is greater than in any other part of the Gulf; there is there from 25 to 45 fathoms, but its rougher sea and the winds which sometimes blow heavily from the mountains render its navigation more difficult.

#### WINDS.

The winds blow generally from the SE., especially in summer time; they commence at midday, cease about five o'clock in the evening, and are succeeded by the land breezes, which blow all night and sometimes in the early morning. This breeze from the NW. is not as strong as the virazon from the SW., but during storms its vigor is augmented. In winter time the winds from the E. and the E. SE. are the most violent; they degenerate into wind storms. However, as we have before said, the proximity of the shores prevents a heavy sea from being raised. A ship anchored within good holding ground will always subdue the power of the wind if the sea does not lend its formidable aid. Vessels have then nothing to fear from the violence of the sea; and the configuration of the Gulf, on all sides surrounded by high mountains, places the second part in safety from storms.

#### CURRENTS.

Near the point of Matapalo very strong currents, from the ebb and flow of the tides, follow the windings of the shore; their greatest swiftness is two miles per hour. In the middle of the entrance to the Gulf the tide has little power; the ebb runs to the SE. The force of the currents diminishes on approaching Point Sombrero, near the end of the Gulf, (larboard side;) they vary in swiftness from a mile to a mile and a half. From the bottom of the Gulf to the Point San Pedro the currents are the same. The place of the greatest power of the currents is from Point Banco to the Golfito; and in spite of their variations, caused by the configuration of the coast, it is by no means rare to encounter upon the starboard side currents running at the rate of three miles per hour; it is then essential to find the time of the tide when the starboard passage is chosen on entering the Gulf.

#### PART II.

The second part comprises Salsepuede, Matapalo to Punta Arenitas, inclusive.

The sandy coast of Salsepuede is bordered by high, woody mountains, of a vigorous and clayey soil; the borders of the sea are fringed with the finest species of cocoa-nut trees; the beach which separates this grove from the sea is only forty yards wide, but the surf renders exportation difficult, and before the opening of a road from the little port of Matapalo to this coast the utilization of these fine products can scarcely be hoped for. The surf, however, protects the trees from

foreign depredations. A little river abounding in fish, and called the Rio Piro, is every year a place of resort for the Indians, who either fish or gather the gum of the caoutchouc tree, of which they manufacture a fabric which serves them for clothing. The mouth of this little river, which, during the rainy season, becomes a torrent, is encumbered with sand banks which render its navigation very difficult.

The bottom of this section is covered by the high mountains of Salsepuede extending towards the northwest. In doubling Point Matapalo the woody plains which surround it are seen. At the little port of this name are still seen a few cocoa-nut trees, which, however, do not appear again, except in a small quantity at Tigrito, and at "Las Palmas" they are never found on the left side of the Gulf.

The land of this part from the sea to the foot of the mountains is level, light, and slightly damp. There is a little creek midway between Matapalo and Punta Arenitas called the Tigrito; it is almost dry in summer time. There are here found gigantic trees suitable for building purposes, dye woods and the cedar, cedron, sarsaparilla, and palm, which last is generally employed in thatching the houses of the country. There is no doubt that this land is the proper kind for maize and rice fields. The little cleared land cultivated by the inhabitants of Punta Arenitas confirms this opinion.

In this part is comprised the point of that name, upon which the first inhabitants of the Gulf have founded a small colony; it is a sandy point jutting into the sea, which encroaches upon it every day, near a little creek to which they have pompously given the name of "river," a creek or "river" which can only be ascended by canoes at high water.

The absence of trees upon this spot, by sparing the labor of the clearing of the land, undoubtedly caused the first settlers to choose the point; others have joined them; the rays of a tropical sun make them pay dearly for their resolution; they can scarcely breathe but in the time of the virazon; some experiments made upon European seeds have given capital results. What will it be, then, when the sides of the mountains are cleared off and seeds sown in all their requisite temperatures? When we quitted the village of Punta Arenitas on the 7th of May, 1857, it contained twenty houses, of which seven belonged to the company, intended to lodge new arrivals for a time, and the men of our service. The want of sufficient force, and the necessity of daily relations with the inhabitants, have forced us to build on this arid but very healthy spot.

The population, numbering about one hundred and fifty souls, is continually increasing; the encouragement given by our presence will undoubtedly sustain them, because our establishment will assure the inhabitants of a sale of their products, and they may, without expense, furnish themselves with necessary articles. The population is composed of natives of Costa Rica and New Granada. Time, a wise, just, and firm administration, and especially the arrival of European colonists, furnishing men accustomed to labor, will attract natives from the surrounding villages, and will make it in a short time an important post on the pacific; the fertility of the soil, the little labor by which man is constrained to find his nourishment, the desires of this

population thus thrown into contact with Europeans, will attract thither new emigrants, excited by the facility of acquisitions. These men, possessed of a field, will accustom themselves to habits of order and social life. Nothing attaches one to a country more than the nook of land which he cultivates. Besides, the inhabitants of this part of America are gentle in their manners, and the government of the place paternal, liberal, and protective.

### PART III.

This section comprises from the "river" of Punta Arenitas to that of Rincon, which will also be described.

The chain of mountains continuing on towards the NW. leave a flat, level place, resembling that already described at No. 2. This section, besides being undoubtedly the richest and most beautiful in the Gulf, is the best for the formation of farms.

Three rivers, whose waters never fail, and whose two extremes, the Tigris and Rincon, can float vessels of from eight to ten tons, promise to double the fertility of this part. The nature of the soil and the productions are the same as those described in No. 2. There are also many of those trees which give the balsam of Tolu. It is in this section that the greater part of the population of Punta Arenitas have chosen the land which they cultivate. An inhabitant established on the banks of the Tigris, the possessor of forty head of cattle, always decides the share one may take in this fertile situation.

Near Tigris, on the banks of the Gulf, we have chosen the land destined for the construction of a great city. On the right it extends towards the river Tigris; on the left towards a small bay. The bottom extends to the Tigris, which, by its turns, thus surrounds the place. Upon the opposite banks of the Tigris rich plains of easy clearance, gently inclined to the foot of the mountains, promise a country of extraordinary fertility. The water of this river, the navigation of which may be readily improved, is excellent. Whaleships resort there to renew their provisions. Upon the place where we shall commence our labors a large house for the accommodation of workmen has been constructed; a road of ten minutes' walk, which leads to the river, has also been opened. The palm tree of which we have spoken grows in abundance upon the banks of the Tigris. The sarsaparilla is of excellent quality. All the different materials suitable for building abound upon the shores of the Gulf, and may be conveyed to the necessary spots without difficulty. All kinds of woods used by the builder and cabinet-maker, palms used for thatching, chalk procured from shell-fish and madrepores, clay for bricks, tiles, and pottery; stones and granites abound; and in our excursions we have frequently found wax and honey. As before said, before reaching the point of "Las Palmas" there is a small river, considerably less than the Tigris, which empties into the sea at the bottom of a large bay. It is one of the happiest situations in the Gulf; one of those which promises a shining future; some samples of its golden sands have been obtained by us, and are to be submitted to a thorough examination. At Palmas, a point which advances into the sea, may be seen two cocoa-nut

trees of which it cannot be said if they have been planted by the hand of man or not. Besides the rivers we have mentioned, there are in this section a number of rivulets, which add still more to the fertility of the country. The river Rincon empties itself into the sea by two mouths bordered by mangroves; its course, which is broken by the sand banks gathered by trees lying in its bed, may be easily cleared, and the river rendered navigable. The larboard side in ascending is covered with lofty trees. Our expeditions into the interior demonstrated to us the fertility of the soil; but after proceeding about two leagues we were obliged to renounce the idea of penetrating further, our want of sufficient force forbidding the possibility of opening a road. At a place upon the right coast are found grassy plains and platanars, (banana plantations,) which last are an infallible sign that the place has been inhabited by Indians. If we had had any doubts, they would have been dissipated by the discovery of a stone hatchet which we found at the Rincon.

#### PART IV.

This section comprises the end of the Gulf from the river Rincon to that of "Las Esquinas" exclusively.

Lofty chains of mountains, against whose feet the sea dashes itself; dense impenetrable forests, a clayey powerful soil, sand banks on which the torrents of winter roar down into the sea—behold all that is known of this region towered over by the high summits of the Cordilleras.

In this section there is a large lake; it is estimated to be eight leagues in circumference, covered with herbs and rushes. We had no boats for its exploration, and no time for travelling around it, so we shall be very circumspect in speaking of it. At some distance from the coast are three islands very celebrated for pearls and a fishery. The oyster pearls of Los Islotes are large and sometimes rich.

In our expeditions we found the trees which produce the balm of "Tolu;" a specimen of this balm, some golden sands, and nacreous shells are all we have obtained from this unknown shore, almost unknown even to its inhabitants.

Apes, wild boars, stags, and some tigers are found here.

#### PART V.

This section, which comprises from the river of Las Esquinas to Golfito inclusive, is destined, "malgre" the abundant rain which falls some hours every day in the rainy season, to become one of the most thickly settled in the Gulf.

The plains will be cleared, the mountains sown, villages raised in this savage place, and all this, thanks to the projected road, connecting the two oceans, which must traverse this section. This part is likewise covered with mountains near the shore; it is only in penetrating into the interior that the plains mentioned above are met. The chain of the Cordilleras towards the NE. in the direction of Boca del Toro is lowered; this circumstance joined to the direction of the



course of "Las Esquinas" promises easy work in constructing the proposed road.

In descending near the point San José there are rich valleys watered by many streams. These valleys are finer than in any other part of the Gulf, and promise great success to any farms that may be established there.

The river of "Las Esquinas," whose source is in the Cordilleras, is wide at its mouth, and possesses a channel of from three to five feet deep, hollowed out in the sand which obstructs its entrance. Its shore is for three-quarters of a league bordered with mangroves, then the same trees we have observed in other sections rise on its banks.

Our colleague, Captain Lallier, has ascended it for about six leagues. It will float small vessels for three leagues from its mouth; it is then no longer navigable except for boats. Its direction is from the E.N.E. W.S.W., its greatest width is a quarter of a mile.

The sand banks formed by the fallen trees being removed, which would be very easy, there is no doubt that this river would form part of the communication between the two seas.

At this place, after having traversed around the lake that we have spoken of in the preceding article, the road which has been opened from Terraba to Golfo Dulce terminates.

It was the only unknown part of the projected route; it was the one which interested us the most. By forcing the two populations of Baruca and Terraba to come to the Gulf in order to supply themselves with provisions, &c., the opening of the route has already crowned our hopes.

We have traversed this passage under the direction of our colleague, Captain Lallier. These labors have enriched us with valuable notes upon this almost unknown part of the Gulf, and given us the certainty of being able to open in this place a remarkably easy route to Boca del Toro, on the Atlantic, by the well-travelled Indian path thereto.

The direction of the Esquinas, which we have given above, shows of what use and economy it will be in the works of communication; this thought has guided us in our study of this section. We have found on the banks of this river many plantations of bananas, sown without doubt by the Indians before their retreat into the interior; sarsaparilla is found in good quality; fish abound in its waters, and it is assuredly the best river we have reconnoitred in our expeditions.

The coast from the point of Las Esquinas to Golfito is formed into beautiful bays, surrounded by high, wooded mountains. The mahogany tree, the guyacan, cedar, sandal-wood, and many kinds of dye woods, and the tree which furnishes the copaiba, are found; by this one may easily perceive it is the richest part by its natural productions; it has also the best share of wild beasts, stags, tigers, and wild boars of three species roam over this beautiful country. The Golfito should, properly speaking, be called a salt lake; its waters are never troubled; winds descending forcibly from the summits of the surrounding mountains cannot raise its tranquil waves; its space is too enclosed to permit surges to be formed. There are here water-courses which never fail, and a fertile valley watered by a small river extending beyond the mountains to the point San José. The greatest length of the Golfito



is six miles, its width a mile and a half. By a peninsula, on which there is a grove of cocoa-nut trees joined to the land by a strip of mangroves, it is divided, so to speak, into two parts. In the first is the valley of which we have spoken; in the second and largest part the Golfito approaches the Rio del Coto; the end and the larboard side are towered over by the huge mountains; the starboard side is bordered by mangroves; only a border of land fifteen furlongs wide, and completely bare, separates it from the entrance of the Gulf. A short distance above there is a small river, but so filled with mangroves that it was impossible for us to ascend it. The pearl oysters of Golfito enjoy the same reputation as those of "Los Iletes." For the rest, the banks of these testaces are deeper in the N. NE. and E. of the Gulf than in the W. and SW.; however, they are more productive. There is a fishery next to Punta Arenitas in four fathoms; near Tigris in two and three; at the Iletes in four, five, and six; at the Golfito in seven, eight, and even eleven fathoms. The Golfito is an immense natural basin or great bay of deep water, and would make the finest military post in the world.

## PART VI.

This section comprises the Rio Coto, Cape Blanco, and extends to the limits of the land belonging to the company. The aspect of the country is changed, the ridge of mountains is broken, more gigantic trees, a sandy coast ornamented with a wall of cocoa-nut trees, at the extremity an immense region of grass plains; such is the view on the eastern shore. From the Rio del Pavon the mountains forming the right entrance to the Gulf incline towards the point Barruca, leaving a large opening bordered with cocoa-nut trees. Behind this magnificent region, which will abundantly afford pasturage to cattle, is an impenetrable swamp, which obliges travellers journeying to David (Chiriqui) to proceed almost continually by the coast. This part is most frequented by boats from Chiriqui and Costa Rica, which flock thither during the fine season to obtain cargoes of cocoa-nuts for transportation, either to David or to Punta Arena, in the Gulf of Nicoya, where they are generally sold at one dollar per hundred.

A boat capable of containing 10,000 peeled cocoa-nuts, with the means used in this country, may be loaded in ten days. We have seen the crew of one boat peel as many as 1,200 in a day; but this is an exception, the average is 400 to 500. The manner of peeling the cocoa-nuts adopted by the natives is this: a stick of heavy wood is driven firmly into the ground, the projecting end is sharpened, and on the nut being violently struck on this, the shell flies off.

The principal river of this section is the Rio Coto, whose direction is from the E. NE. to the W. SW., its opening obstructed by sand banks, and by a chain of rocks extending across it, is only navigable for small vessels at high water. But after the opening is passed, the channel deepens considerably, and for its extent, and the beauty of its shores, this river yields to no rival but Las Esquinas. There was formerly a road from Terraba to Rio Coto, but being little used, it has been overrun by a luxuriant vegetation. We must not forget to men-

tion the important little river called "del Pavon," and a port called "Porto del Banco," a noted place of shelter for small vessels.

This section is rich in natural productions. Besides those we have mentioned, are also found the vanilla and cacao.

In one of our expeditions to Punta Arena, in the Gulf of Nicoya, we heard mention made of a mine of coal discovered at Terraba, and reported by the journals of Costa Rica. We have seen some specimens of carbonized or anthracite wood. These lead us to hope that by excavations a continuation of the veins of Terraba will be found. We have been assured that some veritable coal has been discovered on the coast. It is possible, indeed very probable; but not having a complete verification of the fact, we will not certify it.

To this compilation of the notes taken during our sojourn in the Gulf we will add the state of the thermometer, which was carefully observed during our sojourn. In the morning it marked 77°, (Fahrenheit,) at noon 90°, in the evening 84°. Its greatest variation, during expeditions of four and five degrees into the interior, did not exceed two degrees.

The climate is generally healthy. The dry or summer season commences in December, and ends in April; the winter or rainy season continues the remainder of the year. On the west coast there are some privileged spots, where less rain falls than upon the eastern side. This rainy season is not, as might be supposed, peculiar to the Gulf; it exists through all the territory of Costa Rica, and adds much to the fertility of the soil, without increasing the mortality even among strangers. During the rainy season it does not rain the whole day generally; the storms commence about noon, and continue at different intervals until sunset. In these intervals the sky is as clear and fine as before, and the inhabitants pursue their various occupations. The rains, far from injuring, add to the beauty of these happy climates; they, with the heat, fertilize the earth, and cause that luxuriant vegetation only found in inter-tropical countries. Storms, by swelling the rivers and water-courses, facilitate the transportation of wood and materials, and the products of the whole country descend from the elevated regions to the coast. The rainy season, then, instead of an inconvenience, is a marked benefit, procuring to cultivators several crops per annum. In the lands belonging to the company are found, beside the animals we have spoken of, horses, parrots, wild fowl, ducks, partridges, and all that are common to Europe and America; fruits, such as bananas, citrons, oranges, tamarinds, pineapples, mangoes, and yams; potatoes, vegetables of all kinds; building, cabinet, and dye woods, palms, and bamboos. Emigrants will therefore find in this promising land everything necessary for their subsistence and industry.

COLOMBEL.  
LALLIER.

*Extracts from the report of Admiral Odet Pellion on Golfo Dulce, made in June, 1852, after the hydrographical explorations of Captain Delapin, commanding the corvette "La Brillante," and addressed to his excellency the minister of marine of the empire of France.*

Golfo Dulce is recognizable by the point Matapalo on the W. and Blanco on the E.; these two points determine the entrance. The Gulf runs first N. and S. for 18 miles, enlarging itself a little towards the E. This is the widest part; it is about 19 miles. It afterwards turns to the head of the Golfo and Punta Arenita, and runs 18 miles in a direction NW. and SE., and terminates, slightly narrowing, at the foot of the Cordilleras. The landing, either on the W. or on the E., and the navigation of the Gulf, are exempt from all dangers, unless some sand banks, extending a mile from the extremity of points, could be considered as such. The great depth of water which everywhere exists, even close to the land, is all which may incommode a vessel during a calm.

The Gulf offers few anchorages (unless it be with great length of cable;) Punta Arenitas, in its NW. and SE. course, and the Golfo are the best. Elsewhere by 35, 40, and 50 metres, will be often at a distance of from one to two cable lengths from land. Further off will be found from 50 to 100 fathoms; but as in the interior of the Gulf there is almost always calm water, there never being either sea or strong winds, and as the heavy, compact, green mud which forms the bottom offers excellent holding ground, the depth is rather an inconvenience than a source of danger. A vessel may be lowered for careening purposes at the anchorage north of Punta Arenitas, but the Golfo on the E. offers superior facilities. The Golfo is truly a basin formed by nature, and completely sheltered with a coast rising so boldly that ships may be moored to the shore in a depth of from 6 to 7 fathoms. There is no difficulty in either entering or leaving with regular breezes from the Gulf. A tongue of land divides the waters of Golfo into two parts, the first being the deeper. The shores are elevated plains, bounded by the escarpments of the Cordilleras. This part is subject to rain-storms which are accumulated on the mountain tops by breezes from abroad.

Captain Colombel justly remarks that "the Golfo is an immense natural basin, and would make the finest military post in the world."

Your excellency may follow for all details the reports of the captains of the whole course, Colombel and Lallier, which I now have under my eyes, and which are as exact as possible.

The population of Punta Arenitas is from 50 to 60 souls. They inhabit a village upon a point of land which advances into the sea, and behind expands into an immense plain, the source of future riches to the colony. Ships may anchor at the NE. and SE. of this village at a little distance from land, perfectly safe from the sea which, for that matter, as I have already said, is never very strong in the Gulf. Vessels may there find wood of all natures and all species, and may obtain water with facility at the river Tigris, five miles to the north of Punta Arenitas, profiting by the half tide to enter. At the haci-

enda of the Tigris may be procured very good and fine cows at the price of 20 piastres, (100 francs,) poultry, bananas, cocoa-nuts, and fish, which abound. As for the soil, the notice of Mr. Colombel is sufficiently explicit; I will only say that all the west coast in the whole length of the Gulf is the limit of a considerable plain, insensibly extending towards Salsepuede, the mountains, of a middle elevation from the point Matapalo, inclining towards the W.

Vegetation is powerful and vigorous; some gigantic trees attest the fecundity of the soil, which is watered by numerous rivulets. Two principal rivers fertilize this plain; these are the Tigris and Puncon. The declivity of these lands prevents them from being swampy; and where the mangroves exist on the shore, they penetrate but little into the interior. The axe and fire, in clearing away this fertile country, would cause it to produce whatsoever the laborious colonists demand.

The aspect of the second part, comprised from the islands to the Point Del Banco, is entirely different. The Cordilleras, after having limited the plain almost beyond the river Puncon, continue to skirt the sea to Golfito. The coast is everywhere almost perpendicular, and its abrupt peaks are covered with impenetrable forests. At its turning point towards the south it allows a passage to the river Esquinas, which is bordered by a considerable valley, slightly marshy along the river banks. After the Golfito the land is lower, but rises again at the Point of Banco, forming in this interval a vast plain extending beyond sight, near the interior of which is a lake and swamp, which forbid direct communication with the city of David, the road thither being forced to follow the coast. This plain is watered by the river Coto, the most important of all the rivers of the Gulf. The climate passes for very healthy, although this part of the State of Costa Rica is more humid than the parts towards the north; and it is certain that the crew of the corvette *La Brillante* enjoyed perfect health during the winterage at Golfo Dulce.

#### DIFFERENT CLIMATES OF THE TWO COASTS OF GOLFO DULCE.

Upon the east coast all the storms are collected by the wind from abroad; and during the rainy season it rains nearly every evening at Golfito, whilst at Punta Arenitas, upon the west coast, the atmosphere is free from the clouds accumulated upon the other side.

All the productions of tropical countries grow in abundance in this part of America. I have not seen any cochineal without doubt, because nopals have not been planted. The sugar-cane attains there an extraordinary height and thickness; cocoa-nut trees border, for an extent of more than a hundred miles, the greater part of the coasts of the concession; they give in abundance oil, spirits, and all the other articles which may be attained from this so useful tree. In the forests are found in abundance cedars of great height, dye wood, Indian wood, ebony, and balm trees. Mahogany is scarcer; sarsaparilla, cacao, and the vanilla grow in a wild state. At the "Ilotes," at Golfito, and at Punta Arenitas and Tigris, there is a fishery of the nacre, which furnishes pearls of a fine orient.

During the winterage many whaleships arrive at Golfo Dulce,



where they find wood and water, fruit, poultry, and cattle in abundance; whales also frequent the coast about this period.

The water-courses may be employed with advantage in the transportation of the products of the interior towards the coast; that which has most injured the development of growing colonies has been the difficulty of communication. At Golfo Dulce, by the facilities which this superb Gulf offers in its extent of from 30 to 40 leagues of coast line, by the configuration of the peninsular which forms the western part, and by the rivers which water the valleys and plains, the colonists may transport all their commodities. They can with equal ease provision themselves with productions from other parts of America, and from Europe and Asia.

The dry season lasts from December to April. The thermometer is from  $28^{\circ}$  to  $29^{\circ}$  centigrade, or  $82^{\circ}$  to  $84^{\circ}$  Fahrenheit; on the plain it is less elevated. A few men belonging to the expedition have had a common intermittent fever, which, however, yielded to the first doses of quinine. I attribute this fever to the fatigue undergone in a very distressing service in the execution of the hydrographical labors on all the coast of Costa Rica. No sickness exists at Punta Arenitas; the political chief of the locality assured me that only one death had taken place for two years, which ought to be attributed to the influence of the climate. The opening of the footpath, made by Captain Colombel, from Golfo Dulce to Terraba, has proved the possibility and even the ease of establishing a route in this part. It is known, besides, that Terraba and Boca del Toro, on the Atlantic side, are in continual relations by a route or footpath followed by the Indians, and it is said to be perfectly practicable for a road. The reconnoissances and exploration of this route is indispensable; it is on this side that the greatest facilities will be found for establishing a route between the two seas, and the company should comprehend all its importance. I have always thought that adventurous pioneers would, more easily than companies, found colonies. But at Golfo Dulce are found united all the necessary elements by which an earnest company, having the requisite capital, could create a flourishing colony, if it undertakes the route between the two seas, which, without doubt, would assure its success. It should exert itself in the protection of the interests of capitalists and workmen.

#### COAL.

Researches to find the coal spoken of by M. G. Lafond, as existing at Terraba and other points, have not been made by us, on account of the want of time and sufficient means; but I have procured some specimens of the deposits found near Po Banco; they are lignites, and I here submit the report made by the first surgeon of the Corvette:

#### REPORT OF THE FIRST SURGEON ON THE LIGNITES.

“The best information we have on the coal has been furnished by the captain of the port of Punta Arenitas, who has visited the carboniferous deposits, and found them of sufficiently good quality for the use of a steam-engine he purposed establishing there.



"In addition to this, and near the point of Banco, there exist three basins of carbonized trees. The largest occupies six to nine hundred feet; its height near the cliff is from five to seven feet. The two others are situated about one mile from the first, and are of a less extent, but unknown size. The lignites of the first two deposits are of the great class of dicotyledons; the third belongs to the monocotyledons, of which the individuals acquire great development in the equatorial regions. It is very easy to determine the family to which these belong. Their fracture is brilliant conchoid and takes a bituminous aspect; it is similar to that which volcanic products present; they are lignites of whose internal composition we are ignorant, but which we believe will furnish an excellent combustible. The specimen which belongs to the monocotyledons seems richer in combustible material than the others of more compact texture."

#### CONCLUSION.

The existence of a depot of lignites at Punta del Banco (Golfo Dulce) seems to be demonstrated; but I repeat, the value of these deposits cannot be estimated now, nor until after considerable work in the almost impenetrable forests, and after a thorough exploration, could one obtain a complete knowledge of their value.

L'AMIRAL PELLION.

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# CHIRIQUI LAGOON

SURVEYED BY

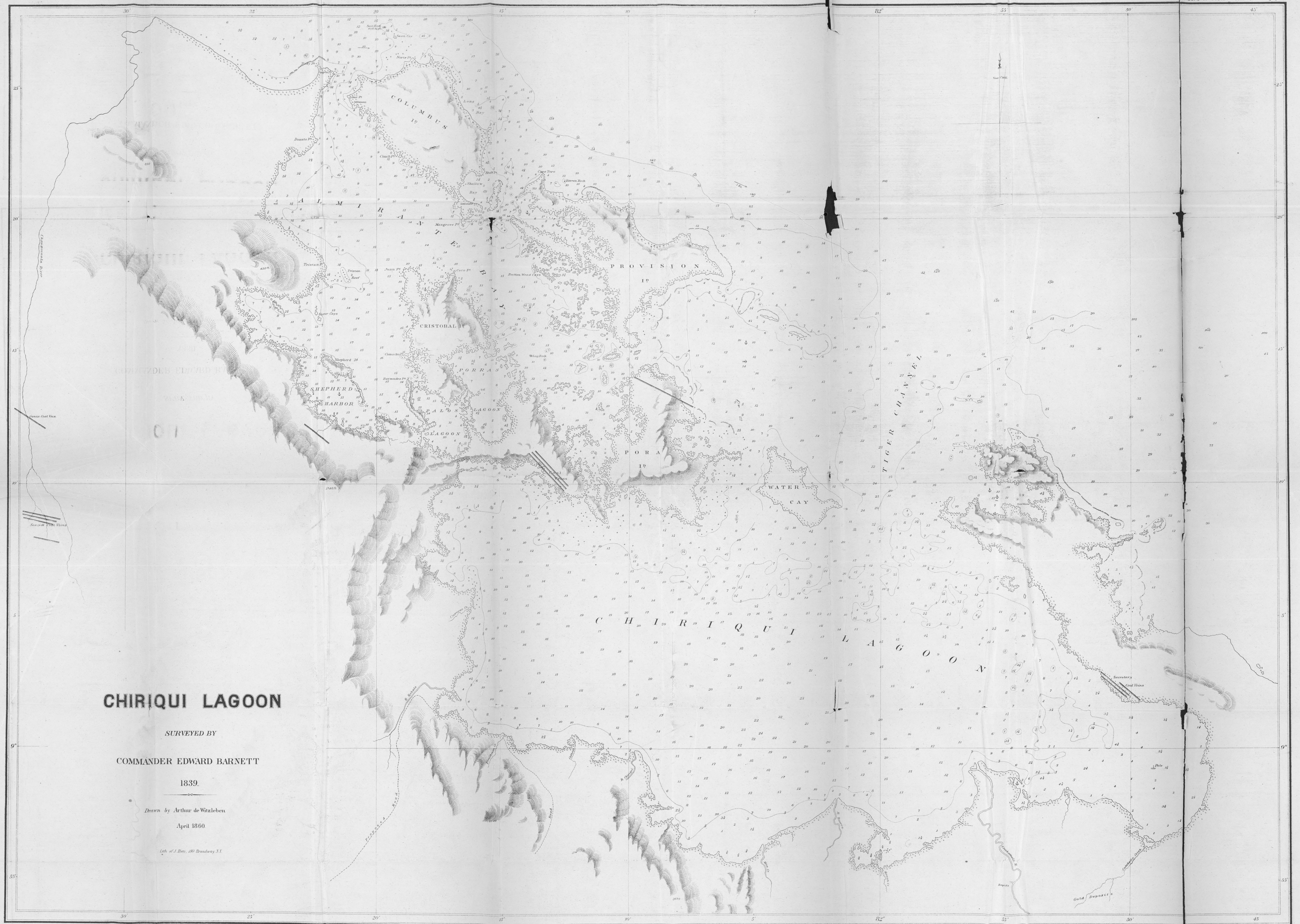
COMMANDER EDWARD BARNETT

1839.

Drawn by Arthur de Witzleben

April 1860

Copied of J. Bar, 180 Broadway N.Y.





# SKETCH OF THE ISTHMUS OF CHIRIQUI

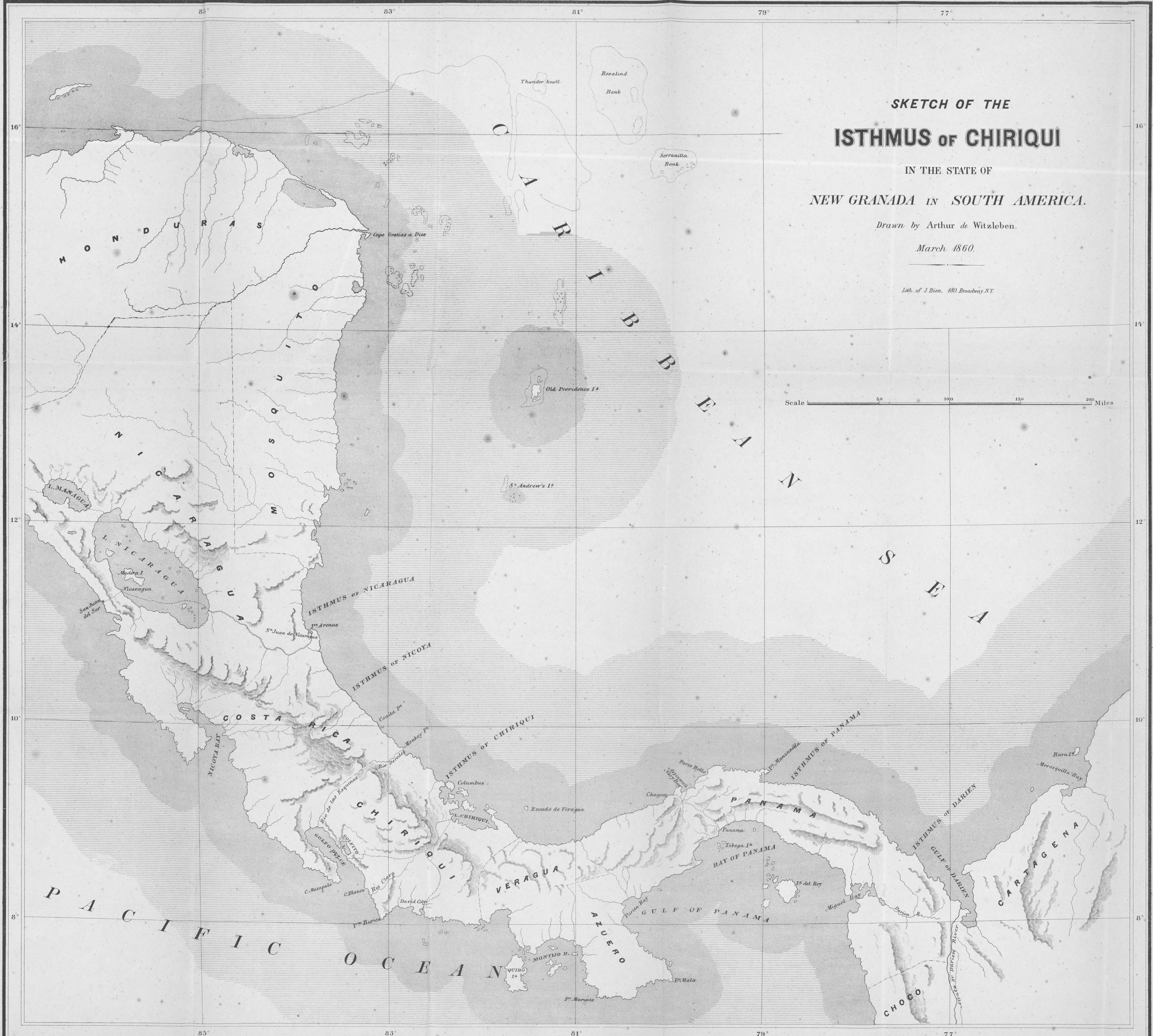
IN THE STATE OF  
NEW GRANADA IN SOUTH AMERICA.

Drawn by Arthur de Witzleben.

March 1860.

Lith. of J. Bien. 180 Broadway N.Y.

Scale 0 50 100 150 200 Miles









## CONTRACT FOR THE PURCHASE OF COAL.

[To accompany Bill H. R. No. 771.]

JUNE 1, 1860.—Ordered to be printed.

## MINORITY REPORT.

Mr. SEDGWICK, from the minority of the Committee on Naval Affairs, submitted the following views :

*The minority of the Committee on Naval Affairs, to whom was referred the contract of the Secretary of the Navy with Ambrose W. Thompson and the Chiriqui Improvement Company, dated May 1, 1859, have had the same under consideration, and beg leave to report thereon :*

The contract in question is referred to in the last annual report of the Secretary of the Navy, in the following terms :

“The department, on the 1st day of May last, made a conditional contract with the Chiriqui Improvement Company and Ambrose W. Thompson, subject to the ratification of Congress, for the purpose of securing to the United States some very valuable privileges in the province of Chiriqui.

“The rights proposed to be secured are :

“1st. A right of way or transit over the roadway granted to the said Ambrose W. Thompson through the province of Chiriqui, from the Carribean sea to the Pacific ocean, free from all tolls or taxes upon officers, agents, seamen, landsmen, mails, munitions, stores, troops, or any direct property of the United States which the government thereof may transport, or cause to be transported, over said road during the continuance of the grant made to Mr. Thompson, for the period of sixty years, by the province of Chiriqui.

“2d. A grant of five thousand acres of land, on each side of the Isthmus, for depots and stations for naval purposes, to be selected at the lagoon of Chiriqui on one side and the harbor of Golfito on the other.

“3d. The right to use as harbors the waters of the lagoons, bays, or gulfs sheltered, or partially surrounded, by the lands of the said Chiriqui Improvement Company and of the said Ambrose W. Thompson, on the Atlantic and Pacific sides of the Isthmus, and wherever their lands may extend.”

In order to ascertain the propriety of making the large appropriation asked by the Secretary to enable him to complete this contract, it will be necessary to inquire, with some care, what the actual rights of the parties are which they propose to convey, and what rights, and properties, and privileges our government can acquire from them.

*The parties to the contract.*

The Chiriqui Improvement Company purports to be a private corporation, chartered by the legislature of the State of Pennsylvania. On examining its charter, and the amendments thereto, we find its history to be this:

April 21, 1854. On date in margin the legislature of Pennsylvania passed an act "to incorporate the CENTRAL AMERICA MINING COMPANY."

Corporators. SECTION 1. Twelve gentlemen named therein, among whom was Ambrose W. Thompson, were created a body politic and corporate under the above name and title, and were empowered "to hold and improve lands in Central America, and to obtain therefrom all minerals or other valuable substances, whether by mining and working or by leasing or disposing of privileges to mine or work such lands as aforesaid; to construct and open for use any and all *kinds of roads* to and from all portions and bodies of the lands of the said company; to have and possess all necessary powers to colonize the said lands; to erect houses, mills, and manufactories thereon, and to use and work the said land; to hold and possess the means of communicating therewith, and to dispose of all the products of all such lands, mines, manufactories, mills, roads, and privileges as may be to the interest of said company.

By-laws. SEC. 2 gives the corporation power to make, alter, and amend their by-laws, and to issue certificates of stock or bonds representing the value of said property, in such form and manner as the by-laws may determine.

Directors. SEC. 3. The corporators therein named were to serve as directors, and a majority was to constitute a quorum until such time as the by-laws prescribed for the election of a new board and until a new board should be chosen.

Repealed May, 1855. SEC. 4. The company to pay into the State treasury within one year a bonus of five hundred dollars.

Bonus. SEC. 5. Stockholders made individually liable for all the debts and liabilities of the company.

Repealed May, 1855. On date in margin a supplemental act was passed, as follows:

May 6, 1854. SECTION 1 provides that it should be lawful for the Central America Mining Company to exercise its privileges and powers in the island of Cuba as well as in Central America.

Cuba.

*Second supplemental act.*

On date in margin the act was again amended, as follows :

May 3, 1855.

SECTION 1. Corporators were added to those named in the first charter, viz: six others, among whom were J. Eugene Flandin and J. A. Morel, (firm J. A. Morel & Co.,) and that the words *and South* between the words *Central America* should be inserted wherein those words occurred in the said first section.

Additional corporators, Flandin & Morel.

Amendment.

SEC. 2. Nine directors were to be elected at the first meeting of the corporators, of whom a majority was to be a quorum.

SEC. 3 repeals the 3d and 5th sections of the first act.

SEC. 4 changes the name of the corporation from *Central America Mining* to "*Chiriqui Improvement Company*."

Whether or not the said corporation has ever been organized under this charter does not appear, and it is not, perhaps, material, for no part of the property, rights and privileges in question appears, by any documents produced to the undersigned, ever to have been conveyed to them, nor has any contract been executed by said corporation so as to be binding upon them in any way whatever. And it is a little difficult to see for what purpose the name of that corporation has been introduced unless to escape personal liability.

The undersigned have here inserted an abstract of the contract as made and executed, from which it appears that it is executed by Thompson for himself, under his seal, and describing himself as the attorney in fact of this corporation, but it is not executed under the seal of the corporation, nor in any way so as to bind them, if they have, in fact, any corporate existence, as will appear from the abstract which follows :

*Abstract of contract between the Secretary of the Navy and Thompson and Chiriqui Improvement Company.*

Indenture, dated May 1, 1859.

The United States, acting by Isaac Toucey, Secretary of the Navy, of the *first part*, and the Chiriqui Improvement Company and Ambrose W. Thompson of the *second part*.

Date.

Parties.

That whereas the Chiriqui Improvement Company and the said Ambrose W. Thompson have become possessed of certain grants, concessions, privileges, and rights and properties in the province of Chiriqui, in New Granada "*as appears by the original titles thereto, copies of which are hereto appended.*"

Recital.

And whereas it is desirable that the United States should have the right of transit over the roadway granted direct to said Ambrose W. Thompson, extending from sea to sea, and the further right to use, as harbors, the waters, gulfs, bays, or lagoons, sheltered or partially surrounded

Advantages:  
1. Transit.

2. Harbor rights.

3. Coal and coal depots, and naval stations. *by the lands of said Thompson, or the said improvement company, and the further right to use the coal for naval purposes, as also to establish coal depots and naval stations—*

## Covenants.

1. Transit and use of road for troops, &c.

*Therefore, in consideration of payments and covenants hereinafter set forth, it is mutually agreed as follows :*

*First. The United States, for considerations after named, "shall have and enjoy a right of way or transit over said road, free from tolls or taxes upon officers, agents, seamen, landsmen, mails, munitions, stores, troops, or any direct property of the United States," transported by the government during the continuance of the grant to said Ambrose W. Thompson*

60 years.

2. 5,000 acres for naval stations.

*Second. That there shall be selected and set apart not exceeding 5,000 acres of such lands on each side of the Isthmus as may be necessary for coal depots and naval stations, to be located so as to secure good and sufficient depots and naval stations without impairing the general value of any site for a city or cities which said Thompson may lay out, the lands to be selected on the main land or the islands, or both, within twelve months from the date hereof. Said party of second part (Chiriqui Improvement Company and Ambrose W. Thompson) hereby conveys the said lands to be so selected, together with the timber thereon, and covenants for further assurance.*

To be selected within 12 months

3. Harbor rights.

*Third. United States to have the right to use as harbors, and the same is hereby conveyed, the waters of the lagoon, bays, or gulfs, sheltered or partially surrounded by the lands of said Thompson, or said Chiriqui Improvement Company, on Atlantic and Pacific sides, and in the bays and gulfs, wheron the lands of said Thompson or said company may extend.*

4. Coal

*Fourth. The United States to have right hereby conveyed to all coal for naval purposes at or near the points selected for coal depots and naval stations as aforesaid, and if found of superior quality elsewhere, the United States to have the right to use the same, subject only to the tax of one dime per ton, to be paid the province, and the cost of mining and delivering the same.*

Payment to T. \$300,000.

*Fifth. The United States agree, for the foregoing considerations, (repeating them,) "to pay to the said A. W. T., for himself, and said C. I. Co., the sum of \$300,000, provided Congress shall approve this contract and make the necessary appropriations therefor at its next session, otherwise this contract shall be void."*

Attestation clause.

*In witness whereof, I. Toucey, for the United States, and the said A. W. T., for himself, and as the duly authorized*

attorney in fact for the said C. I. Co., have signed, sealed, acknowledged, &c.

AMBROSE W. THOMPSON, [L. s.]  
*For himself and the Chiriqui Improvement Company.*  
 ISAAC TOUCEY, [L. s.]  
*Secretary of the Navy.*

In presence of CHARLES W. WELCH.

The title to the various rights and properties proposed to be conveyed was produced before the committee, and is as follows :

THE LAND GRANTS AND PRIVILEGE OF TRANSIT.

On the date in margin, the provincial legislature of *Feb. 20, 1854.* Chiriqui, acting under authority of article 10 of the constitution of the republic of New Granada, passed the following ordinance ; it comprises twenty-one articles, an abstract of which follows, viz :

ART. 1. Gives A. W. Thompson exclusive privilege for sixty years, for improving in a solid manner, fit for four wheeled carriages, the provincial road *opened more than fourteen years ago*, between *David* and Bocas del Toro.

ART. 2. Work to be commenced in two years, and to be completed in six years thereafter, and during the first of the six years two leagues are to be completed, starting from the Atlantic coast.

ART. 3. When completed, Thompson is to inform the governor of the province, he by himself, or a commission, is then to examine the road with Thompson, and to declare him, if it is completed, in full exercise of the rights and prerogatives thereby conveyed.

ART. 4. No right to any competing route is to be given during the continuance of Thompson's privileges.

ART. 5. Thompson is privileged to construct such offices, bridges, docks, basins and all such buildings and edifices which may be required for the enterprise ; to establish such tolls and charges as he thinks proper, and to open any part of the road when he pleases.

ART. 6. *No foreign troops or implements of war* can pass without the consent of the general government of the republic.

ART. 7. To carry the Granadian troops, stores, mails, and all their public officers, free of tolls and passage. Immigrants to pass free of tolls.

ART. 8. In consideration of the difficulties of the enterprise, it is reputed one of " public utility," and Thompson is entitled to " *receive gratuitously*"—



## CONTRACT FOR THE PURCHASE OF COAL.

1. All the land required up to 25 varas in width along the line, for the improvement of the road.

2. All land necessary for the buildings and improvements mentioned in article 5. All timber, stones, gravel, &c., for improving and repairing the road.

3. Fifteen thousand fanegadas of land north, and twenty-five thousand south of the Cordilleras, of the public or common lands of the province, to be selected by Thompson.

4. Free introduction, without duty or tax, to all persons and things belonging to the enterprise.

5. Exemption from taxes upon the road, persons, works, buildings, establishments, and vessels belonging to the enterprise, not to apply to persons or things foreign to the undertaking which might come in their vessels.

ART. 9. No individual lands to be taken.

ART. 10. When the lands are measured Thompson is to be put in possession.

ART. 11. *Shows when Thompson is to receive deeds, i. e., in proportion to work on the road completed. (He is entitled to possession when he commences the work and selects and has the lands measured at his cost; but he is not entitled to any grant or title until the work is completed and accepted.)*

ART. 12. Thompson to pay the cost of measuring the lands.

ART. 13. When this privilege is accepted the province is not to *concede* lands until Thompson has selected his.

ART. 14. Thompson is to make an inventory of all improvements, &c., when the road is complete, and every five years thereafter, for the governor.

ART. 15. If default is made the privileges are recalled, unless by fault of government, war, &c., &c.

ART. 16. If forfeited by Thompson he is entitled to no indemnity.

ART. 17. At the end of sixty years Thompson is to deliver the road, wharves, docks, &c., &c., to the government.

ART. 18. Thompson is authorized to assign his interests, properties and privileges, but *not* to any *foreign government in any case*.

ART. 19. Questions between parties to be settled according to the laws *by arbitration*.

ART. 20. Thompson to have 20,000 more fanegadas of public lands on these conditions:

1. If he, Thompson, maintains at his expense the corps of police necessary to preserve order along the road.

2. Pay to the province 2 per cent. on the net proceeds of the road semi-annually.

Titles to these lands to be given proportionably as before.

ART. 21. This ordinance repeals the one granted in 1852, if accepted by Thompson.

Accepted by J. Eugene Flandin, (describing himself as *Thompson's Attorney*,) 20th February, 1854.

*Amendatory ordinance by the Provincial Legislature, under Article 21 of the Municipal Constitution.*

1855.

1. Extends the *two years* for commencing preparatory works from 1st September, 1855, two years, to 1st September, 1857.

2. Ordinance of February 1854 is amended accordingly.  
BOGOTA, July 1, 1855.

Department of Interior certifies a report of the Attorney General that the grants to Thompson do not conflict with the 7th article of the contract with the Panama railroad, because it was an old road in existence when that contract was made, and is therefore *within the exception in that article*.

The provincial legislature passed an ordinance granting a privilege to Señor Santiago Agnew, for colonizing at Golfo Dulce. 1852.—October 20.

ART. —. Privilege conceded him of colonizing, with natives or foreigners, the lands lying between the rivers Las Esquenas and Clara, the inhabitants to remain subject to the government of New Granada.

SECTION 1. Grantee to commence colonization in sixteen months from date of sanction of this ordinance.

SEC. 2. Grantee to give notice as soon as he commences colonization.

Ordinance fixing the limits of the privilege, before granted, to Agnew, and defining its boundaries more accurately.—(Santiago Agnew was governor of Chiriqui.) December 31, 1852.

*Resolution.* That Santiago Agnew had given notice that he had commenced colonization. He was thereby declared in possession of the privileges granted by the ordinance. May 4, 1853.

ROMERO.

*Papers certified by Santiago Agnew.*

In the city of David, before a notary public, appeared Governor Agnew, and declared that in all the aforesaid grants he recognized as an equal partner John Eugene Flandin, of New York. He also gives thereby to said Flandin full power to act for him in carrying on the colonization, and to make all contracts, sales, &c., that may be required, and to sign all documents and instruments, giving him, the said Flandin, the full administration of the business. November 13, 1854.

This power of attorney and acknowledgment of part-

nership rights was duly recorded, as is certified by the proper officers and by the governor.

No other papers or documents were produced to the committee showing any other or further grant, transfer, or assignment of any of the lands, interests, rights or privileges of the respective parties named.

*Title to the coal mines and lands.*

No copy of the laws of Granada, or of the province of Chiriqui, have been produced to the committee showing how a title to coal mines can be lawfully acquired in that province. The undersigned infer from the papers produced and relied upon, as evidencing the claimant's title, that the province bestows gratuitously the title to mines upon any person who will open a mine for working which is unoccupied, and to which no other claimant appears. The discoverer of an unclaimed coal mine *denounces* it to the governor of the province, and demands a title. The governor directs the magistrate of the district to proceed to the locality and post a notice of the fact for three weeks, and if no person appears to claim the mine within that period the discoverer, if he has opened a shaft, as required, is put into possession, and a certificate of the proceedings is *expedited* by the governor, and this makes his title. The province reserve a duty of one dime per ton upon the coal mined.

This would seem to be a very easy and expeditious mode of acquiring titles to mining property. The obvious intent is to encourage the opening and working of the mines from which the government derives its compensation. But whether under the form and color of such a law adventurers would be permitted to acquire title to monopolize all the coal mines of a province, not one of which ever open and work to the extent of raising a ton of coal, would seem to be questionable. If a title can be acquired thus easily in an unsettled country, where a notice of that description would be seen only by the birds and beasts, there is the same facility for losing it. It does not always happen, however, that the grantee of the mines (Flandin, of the firm of Morel & Co.) is also a partner of the governor, (Agnew.) This circumstance greatly facilitates obtaining titles, but might not serve to strengthen it.

August 16, 1854.

The governor, (Agnew,) on the petition of J. A. Morel & Co., asking for the title to certain coal mines *denounced* by them in the district of Bocas del Toro, the petitioners being in full possession, states—

1. That the Jefe Politico of the canton, under instructions dated 28th October, 1851, did post bills for three consecutive weeks, without any one appearing as a claimant for the said mines.

2. That, according to the declaration of the commissioner appointed by the Jéfétura, accompanied by two witnesses, in the absence of the notary, on every one of the veins of coal of "Sierschick," "Churia," "Jinia," and "Changuinola," and four other curb shafts, had been sunk  $1\frac{1}{2}$  x 10 varas wide and deep.

3. There being no neighbors, the commissioner made the measurement and put Morel & Co. in possession.

4. That foreigners enjoy the same civil rights as Granadians; and therefore he expedites this title, by which Morel & Co. are full and unreserved owners, in property and possession, of these coal mines.

[*J. Eugene Blondin* is the partner of Morel, under the style of J. A. Morel & Co.]

*The same title* is also expedited for the mines denounced in the localities, Banana, Jones, Cultivation, Splithill, Sandy, Suarian, and Lunckoo. 1834.—August.

These statements of the governor are the title deeds to the coal mines.

Title to coal mine on Pope's island is acquired in the same way by J. A. Morel & Co. 1855.—July.

The cabildo of the district Bocas del Toro, to enable Morel & Co. to carry on their coal mining, granted them 25,000 fanegadas of land, and the right to make a canal from the river Changuinola to the lagoon, they to pay one dime per ton for the coal mined up to 10,000 tons, and then a half dime. 1854.—July 14.

It will be observed that upon the abstract of title there is no conveyance, grant, or assignment of any estate, property, or privilege to the Chiriqui Improvement Company, and it is a little incomprehensible why the Secretary of the Navy should have entered into a contract with that corporation, or how the Attorney General could have certified to their title. By a reference to the first section of the act of incorporation, it will be further observed that many of the rights, which are proposed now to be acquired from that company, they were never authorized to hold. It is doubtful whether they were enabled to take a grant of lands—certainly of nothing beyond mineral lands. They were a mining company, and only authorized to construct and improve roads necessary for, and incident to, their mining operations. They were not chartered to open a transit by railroad or canal, or otherwise, from the Atlantic to the Pacific oceans; nor to acquire, hold, or convey any harbor rights. These things were and are entirely foreign to the object for which they were incorporated. Perhaps, therefore, as they had nothing to sell, it was of no consequence that the contract with the Navy Department was not executed so as to bind the corporation in any way whatever.

*The extent of Thompson's title.*

This is wholly derived under the ordinance of 1854. Indeed, having examined the contract which purports to have copies of all the

grant of titles annexed, we may say that this ordinance and the acceptance thereof by Flandin, as Thompson's attorney, is all the evidence of title there appearing.

The Secretary, in stating the advantages of this contract in his report, specifies the following :

*First.* The acquisition by the United States of harbors on the Atlantic and Pacific sides of the Isthmus.

It may safely be admitted that safe and capacious harbors exist there. But when has it been discovered before that harbor-rights could be purchased of and granted by an individual or a private mining corporation. There is a law that upon streams not navigable, the title of the riparian owner extends to the middle of the stream, but it has been reserved for the wisdom of the maker of this contract to discover that bays and gulfs, where the tide rises and falls sixteen feet, and capacious enough to float the navies of the world, could be sold by an individual or a corporation by whose lands "they were sheltered or partially surrounded." It has hitherto been supposed that harbors and navigable rivers were of public jurisdiction—to be controlled by the government of the country—rights in which were to be acquired from the sovereign authority by treaty, and not that they were the subject of purchase and sale by individuals, and incident to the ownership of lands upon the shore. But if this new rule of public law is to prevail, the owners of lands upon Staten island could, by grant to the English or French nation, enable them to set up a naval station and erect fortifications within the harbor of New York. It adds nothing to the absurdity and folly of such a claim as this, that there is not one scintilla of evidence in the papers before the committee, that Thompson or the Chiriqui company have ever selected, been in possession of, or acquired title to a single acre of land either upon the Chiriqui lagoon or the Golfito. Indeed it does not appear by any paper, map, or otherwise, that he has even selected any of the lands to which he is entitled or paid for their survey, and it does affirmatively appear that he has not yet entitled himself to a grant thereof by the terms of this ordinance. But if he had a full title by grant to the lands mentioned in this ordinance, and had selected and occupied lands fitted for our use as naval stations, he would not be at liberty to sell nor we to buy for any such purpose, for two reasons. One of which is that by public law no nation has a right to purchase and use lands for any purpose, and much more for such a purpose, within the jurisdiction of a foreign State, and an attempt to invade their sovereignty in such a mode would be just cause for war. And a second and controlling reason in this case is that Thompson, by the 18th article of the ordinance, is expressly prohibited from assigning any of his interests or privileges or rights thereunder, to any foreign government, in any case whatever. So that an attempt to take possession of any of these lands for naval stations by this government, would be wholly without right and by invasion of the territory of a peaceful State. If we should ever find it necessary to seize any of these territories, it is to be hoped we may do it under some more decent pretext than a grant from Thompson.

*Second.* A right of transit over the roadway granted to said Thompson, free from tolls upon troops, munitions, &c., belonging to the United States.



But by the sixth article of the concession to Thompson he is not at liberty, but is expressly prohibited from giving any such right of transit to the troops of any foreign government. Besides this, Thompson has no right by this ordinance to construct a railway at all.—(See article 1 of the ordinance, opinion of Attorney General, last clause.)

An attempt was made during the last winter to obtain this right to construct a railroad from the government of New Granada, but the project of a law for this purpose was indefinitely postponed by the Senate. Thompson having failed in his attempt to secure a right to construct a railroad, and having no right whatever to permit the transit of foreign troops over his road, which is practicable only for mules, has nothing to grant to this government which it is an object to buy.

A supply of coal for naval purposes for the home and Pacific squadrons is mentioned by the Secretary as one of the advantages of this contract, but is not made prominent by him. The report of the naval committee, however, says that "*a controlling consideration*, no doubt, with the department in making the present contingent contract is the fact that coal of such quality as to be available for purposes of steam navigation is found in several places near the seaboard, in the province of Chiriqui, *and is represented to be available for mining*, and if so, the *privilege of using it*, provided for in this contract, must eventuate in a large saving to the treasury."

To this we reply :

*First.* There is no evidence that any coal mine has been successfully opened or worked at any time in the province of Chiriqui. Not so much as a single ton of good coal has ever been taken from any such mine, so far as the committee is informed by the evidence before them ; although the traces of coal formations which have been discovered, and which, long ago, were known to the French and English, are directly upon the shore, and observable in the face of the cliffs, no attempt has been made by anybody to open and work a mine.

*Second.* No investigations have been made or directed by the Navy Department to ascertain the fact of the existence of any such mine, capable of being advantageously opened and worked, or the cost of opening and working any mine alleged to exist there. No survey or map of the mine or mines proposed to be worked has been made by or on behalf of the government. It is true, that one of our naval officers was directed to report as to the quality of coal alleged to exist there, and he took a very small quantity of coal from Pope's island, but not from any mine, for none is opened there, and whether this particular specimen was found or carried there does not appear. It was used on the vessel, and the engineer states as to its qualities. The experiment does not even tend to show that there are practicable mines there which our government should secure if they could.

*Third.* The contract contains no guarantee that there is any practicable working mine accessible to this government ; nor that a single ton of coal shall be furnished the department at any time, nor for any price ; nor that they (the Chiriqui Improvement Company) will ever attempt to open or work any mine whatever.—(See section 4.) It merely gives to the government a right to engage in the business of

coal mining in a foreign country, and jurisdiction is made by a person and corporation who have no greater authority to grant us this power than they have to authorize us to open and work coal mines in England or Belgium.

*Fourth.* The evidence furnished the committee proves that there are no practicable coal mines yet discovered about the lagoon which can be economically worked, even if the coal is of suitable quality. The undersigned have examined this branch of the subject with considerable care, and are decidedly of the opinion that no evidence has been furnished of the existence of coal deposits which can be relied upon to furnish us a supply for our navy. The veins are so situated, and of such insufficient thickness, that they cannot be worked. We have made and appended to this report an abstract of the report of a Mr. Mauross, who examined these coal formations at the request of the owners, and who has probably made as favorable a report of their property as could be made truthfully, and we rely upon the statements of that report to sustain us in the views here expressed.

*Fifth.* No title to the coal mines is shown either in Thompson or the Chiriqui Improvement Company, but in Morel & Co., if anybody. The title is *expedient* to them, and it does not appear that they have ever assigned their right and interest in the mines either to Thompson or the Chiriqui Company.

The title to Morel & Co. is one which will not bear examination. The idea is not to be tolerated that, upon proceedings such as we have herein set forth, a private firm can be permitted to monopolize all the coal mines of a country, and if they should ever prove to be valuable, we have no doubt that the government would find easy means and a short method to set aside titles so acquired. Indeed, reasons for setting aside these titles are suggested upon the very face of the papers—we mean fraud—in that it appears that the governor of the province, who is conveying the mines, is the partner of the speculator who is obtaining the title to them.

In the opinion of the undersigned, there is one plain and simple answer to this whole proposition in relation to coal. The Navy Department has now the right by law to supply our vessels with coal by purchase and to establish necessary depots. They are not and never should be authorized to engage in mining either at home or in any foreign country. If Thompson, or Morel & Co., or the Chiriqui Improvement Company, can furnish the navy with coals of proper quality and cheaper than they can be furnished by our miners, the department is fully authorized now to make purchases of them, and they will of course be glad of good customers. No legislation whatever is necessary on the subject.

The minority of the committee have been referred to the statement of the Secretary of the Navy in his report that the title of the Chirique Improvement Company and of Mr. Thompson had been referred to the Attorney General and approved by him. We should have felt a good deal of hesitation in opposing our opinions as to this title to those of the first law officer of the government, but we find, upon an examination of his opinion, that our views are fully sustained by him. We annex hereto a copy of his opinion, from which it appears that,

prior to the 14th of March, 1859, he had examined the title, and had formed the opinion that they (Thompson and the Chiriqui Improvement Company) *had not shown a right to convey* the property in question for seven reasons, which are repeated in his letter of the 11th of May, 1859. The first six objections, he then states, had been removed by the production of further evidence, but the seventh remains in full force; and that is, that our government could not purchase the rights proposed without a violation of the law of nations. That objection he states, distinctly, has not been removed, and it would seem to be a controlling reason against making the purchase.

But it is manifest that the Attorney General assumed that the title to Thompson and the company was complete without examination. His attention was only called to the point indicated, in his opinion, of the right to convey; because, in the absence of any grant or assignment to the Chiriqui Company of the mines from Morel & Co., to whom the title was originally given, it is clear that no lawyer, and much less the Attorney General, could have certified their title to them. And it is equally clear, that in the absence of proof by Thompson that he had fulfilled the conditions of the ordinance and of the conveyances which were to be given him on their being fulfilled, he could not have certified that he had any title to the lands therein mentioned. It has never been pretended, and is not now, that Thompson has improved the road between David and Boca del Toro "in a solid manner, fit for four-wheeled carriages." So late as March last it is only pretended that it is traced and so far opened as to be practicable for loaded animals. A mule probably could go over with such a mail as they would be likely to have from Boca del Toro to David, where there are no inhabitants at all at one end of the route, and none who can read or write at the other. A letter to the company from a Mr. Coffin, who went out in December last to look for gold, shows that with an Indian guide he had great difficulty in even finding this great transit from ocean to ocean. And until the conditions of the ordinance are performed, of which the completion of this road in the manner described is one, it is clear that Thompson can have no title to any of the property upon which a prudent lawyer could advise a client that he could safely loan one thousand dollars.

For the foregoing reasons, the undersigned recommend that the contract of the Secretary of the Navy with Mr. Thompson and the Chiriqui Company be disapproved.

C. B. SEDGWICK.  
JNO. SCHWARTZ.

MAY 21, 1860.

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ATTORNEY GENERAL'S OFFICE, May 11, 1859.

SIR: On the 14th of March last I addressed to you a communication concerning the title which the Chiriqui Improvement Company had to the property in New Granada which they proposed to sell to the United States government. It was then my opinion that they had not shown a right to convey the property for the following reasons:

1. There was not sufficient evidence that the Improvement Company had been chartered and organized.

2. There was no authentic copy of any grant by the province of Chiriqui to the Improvement Company.

3. There was no evidence that the sovereign power, in which the property vested by public law, had ceded it to the province of Chiriqui.

4. There was no evidence of any law authorizing foreigners to hold property like this.

5. The mining rights did not appear to have been denounced under the sanction either of the supreme government of New Granada or the government of Panama.

6. No copy of the constitution was produced, nor any other authority shown to the provincial legislature of Chiriqui, either to authorize a denouncement of the mining rights, to concede the lands, or grant the privilege of a roadway across the Isthmus.

7. The government of the United States could not, without violating the law of nations, take and hold possession of such property within a foreign country.

Upon a re-examination of this title in the light of new evidence which accompanies your last letter, I think the first six objections formerly existing may now be considered as disposed of. The Chiriqui Improvement Company shows that it was organized; the original grant of the province is produced and authenticated, and the right of the province to make, and the capacities of the parties to take the grants in question, are established by the certificate of the New Granadian minister at Washington.

The objection still remaining is, that the United States cannot take exclusive possession of the property without the consent of the New Granadian government. You are to judge how far this consent has been given, or what necessity there may for be further negotiation. In the paper written by General Herran he does not allude to this point.

It must also be remembered that this grant of a roadway does not include any right to make a railroad.

I am, very respectfully, yours, &c.,

J. S. BLACK.

Hon. ISAAC TOUCEY,  
*Secretary of the Navy.*

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REPORT OF NEWTON S. MAUROSS.—ABSTRACT.

*First location.*—At Secretary, on the interior shore of Valiente promontory. Three beds crop out on the beach.

1. One in face of cliff forty feet high, and bed is twenty feet from water. Vein about four feet thick, and exposed; ten or twelve yards in length.

2. Another bed at water's edge, which has been laid bare by the action of the water, and may be seen under the water several yards from the shore.

Its out-crop on the land could not be detected.

A pit sunk through it at high-water mark showed it to be six feet in thickness, though the lower two feet was much mixed with sand.

3. Bed at edge of water; two and a half feet thick.

*Quality.*—The coal of three beds is of a soft and bright quality.

*Second location.*—Pope's island. Bed five to six feet thick, being exposed by the action of the sea.

This bed bears marks of disturbance, being bent and reduced to a foot in thickness, when it appears in the cliff above the water. Whether it regains its thickness can only be decided by the operations of an adequate mining force sinking shafts upon it.

*Quality.*—It is of a much harder and better quality than that at Secretary.

*Third location.*—Saddle-hill promontory, Split-hill, Two Serpents' creek, and Endeavor creek.

In the first of these localities three beds of coal were cropping out in the beds of streams. They varied from one to two feet in thickness.

In the second locality three beds were also distinguished; one of them had a section of four feet.

In the third locality three beds *were detected*, varying from three to five feet in thickness.

*Quality.*—The coal is, however, of a soft character, and inferior to that of Pope's island, or the localities hereafter to be described.

*Fourth location.*—Cultivation creek—one mile from shore. The seam is about one foot in thickness, and exhibits a quality superior to that of Pope's island. The small size of this vein precludes the hope of its being itself of value; but he recommends the region for further examination.

*Fifth location.*—*Chauguinola river.*—1. *Jinia.*—A single seam is exposed at intervals along the bed of a creek for several hundred yards—coal is hard and brilliant.

Thickness of the bed is too small *for successful working.*

2. *Sierschick.*—Seams appear in both banks of the creek. On the east bank are several seams, varying from one foot to eighteen inches in thickness. They are distributed through a mass of strata *forty feet thick.*

On the west bank the seams are assembled into three veins of from two to three feet thick, each occupying with the intervening rock a thickness of twenty feet.

This spot is 434 feet above the level of the sea.

A bed was visited several miles further up the bank at an elevation of 700 feet above the sea. A land slide had covered the spot so that only a few fragments of the vein could be seen. Were of a bright and hard quality, of sufficient firmness to bear transportation.



